1 Installing the Card in a Power Macintosh 4400 or 7220

This chapter describes how to install the PC Serial and Parallel Card in a Power Macintosh 4400 or a Power Macintosh 7220.

After you install the PC Serial and Parallel Card hardware, go to Chapter 6, "Updating Your PC Compatibility Card Software." Then turn to Chapter 7 to learn more about connecting PC-compatible equipment to your PC Serial and Parallel Card.

What you need

Before beginning the installation process, make sure you have the necessary parts: the PC Serial and Parallel Card and the peripheral flex cable. You'll also need a Phillips screwdriver and your PC Compatibility Card user's manual.

Installing the PC Serial and Parallel Card hardware

WARNING The installation of the PC Serial and Parallel Card is technically complex. Unless you are comfortable installing components inside computers, Apple recommends that you have the PC Serial and Parallel Card installed by your Apple-authorized dealer (who may charge a fee). If you attempt to install the card yourself, any damage you may cause to your equipment will not be covered by the limited warranty on your computer.

Do not attempt to install the card or connect the cables without first reading this manual.

There are several steps to installing your PC Serial and Parallel Card hardware:

- opening the computer
- preparing the slots
- attaching the peripheral flex cable to the PC Compatibility Card
- attaching the peripheral flex cable to the PC Serial and Parallel Card
- inserting the PC Serial and Parallel Card
- replacing the computer cover

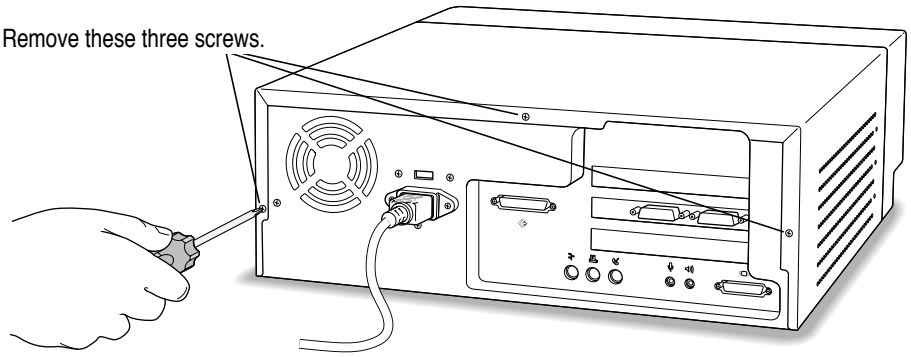
Opening the computer

1 **Shut down the computer and disconnect all cables from the computer, except for the power cord.**

Leave the computer plugged in for now, to ground it and protect its components from static electricity damage.

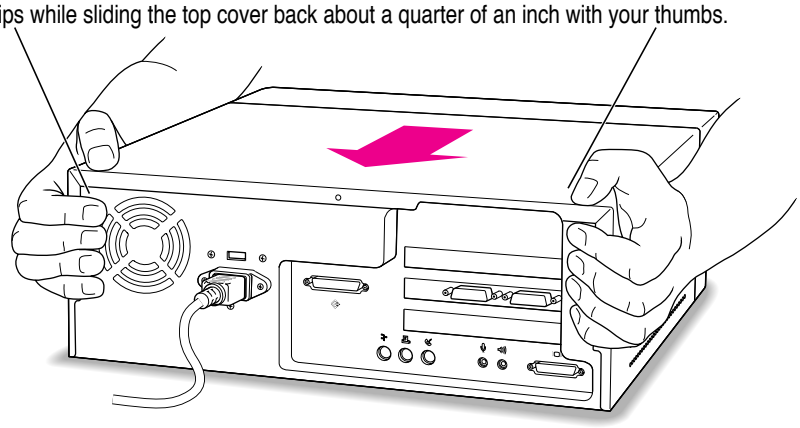
2 **Remove the three screws as shown from the back of the cover.**

Remove these three screws.



3 **Position your hands on the unit as shown and slide the cover back.**

Firmly grasp the back of the computer and push in on the rear panel with your fingertips while sliding the top cover back about a quarter of an inch with your thumbs.

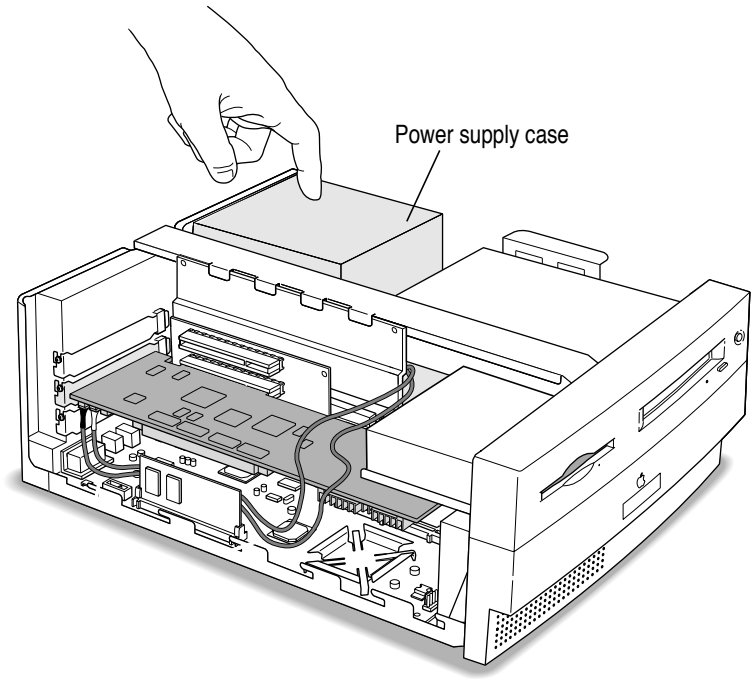


4 **Lift the cover up and off the computer.**

5 **Touch the metal part of the power supply case inside the computer.**

Always do this before you touch any parts, or install any components, inside the computer. Touching the power supply case helps release static electricity from your body and prevent possible damage to internal components.

IMPORTANT You can collect static electricity just by walking away from and then back to your computer. If you need to move away from your computer during installation, remember to touch the metal part of the power supply case again before you continue installing.



6 **Disconnect the power cord from the back of the computer.**

Preparing the slots

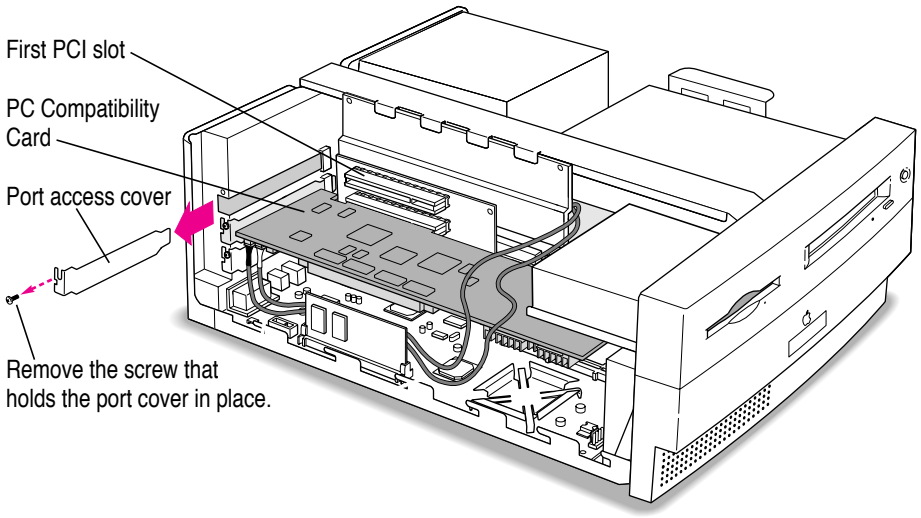
7 **Unscrew and remove the metal port access covers for the slots you need.**

If you are installing the PC Serial and Parallel Card at the same time you are installing a PC Compatibility Card, unscrew and remove the metal covers to both PCI slots.

If you already have a PC Compatibility Card installed in your computer, then unscrew and remove the card without disconnecting the audio cables. Refer to your PC Compatibility Card user's manual or *PC Compatibility Card Update* for information on how to remove the bracket that holds the PC Compatibility Card in place.

Next, unscrew and remove the metal port access cover to the top (first) slot.

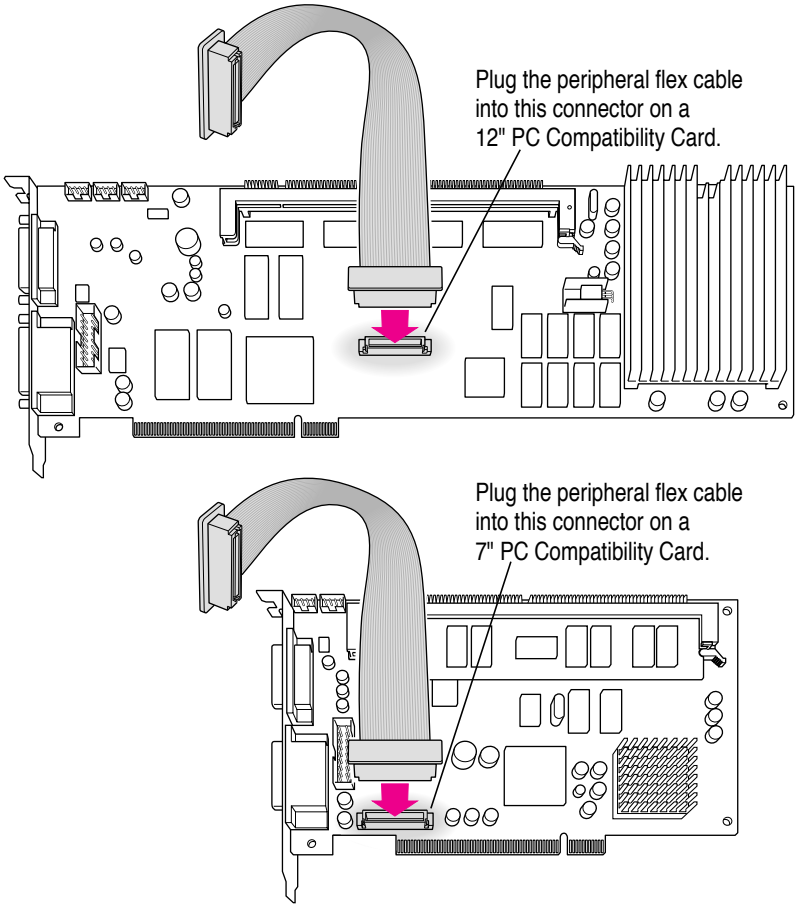
Keep the screws; you will reinsert them later.



Attaching the peripheral flex cable to the PC Compatibility Card

8 **With the PC Compatibility Card turned face up as shown, attach the peripheral flex cable to the connector.**

IMPORTANT Always hold the card by its edges. Don't touch any of the components on the card.

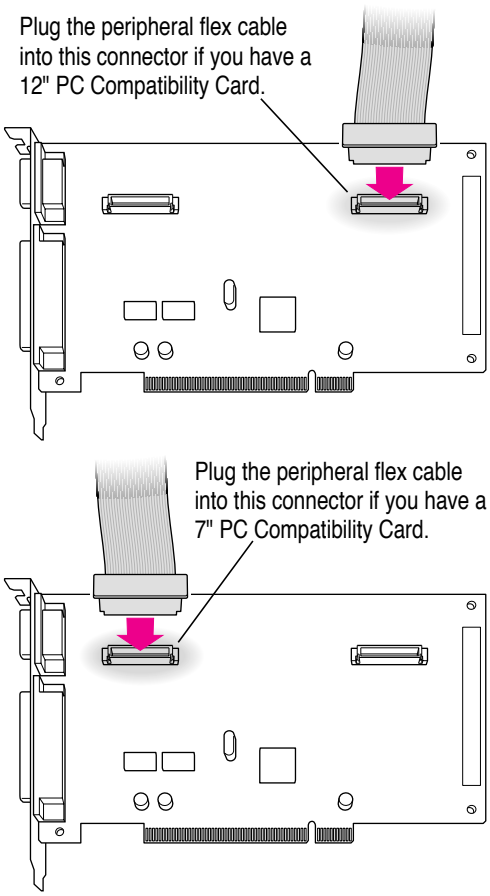

Plug the peripheral flex cable into this connector on a 12" PC Compatibility Card.
Plug the peripheral flex cable into this connector on a 7" PC Compatibility Card.

9 **Insert the PC Compatibility Card into the second slot.**

Follow the installation instructions in your PC Compatibility Card user's manual or *PC Compatibility Card Update* to install the bracket that holds the PC Compatibility Card in place. Then continue with the next step.

Attaching the peripheral flex cable to the PC Serial and Parallel Card

10 **Connect the peripheral flex cable to the PC Serial and Parallel Card.**


Plug the peripheral flex cable into this connector if you have a 12" PC Compatibility Card.
Plug the peripheral flex cable into this connector if you have a 7" PC Compatibility Card.

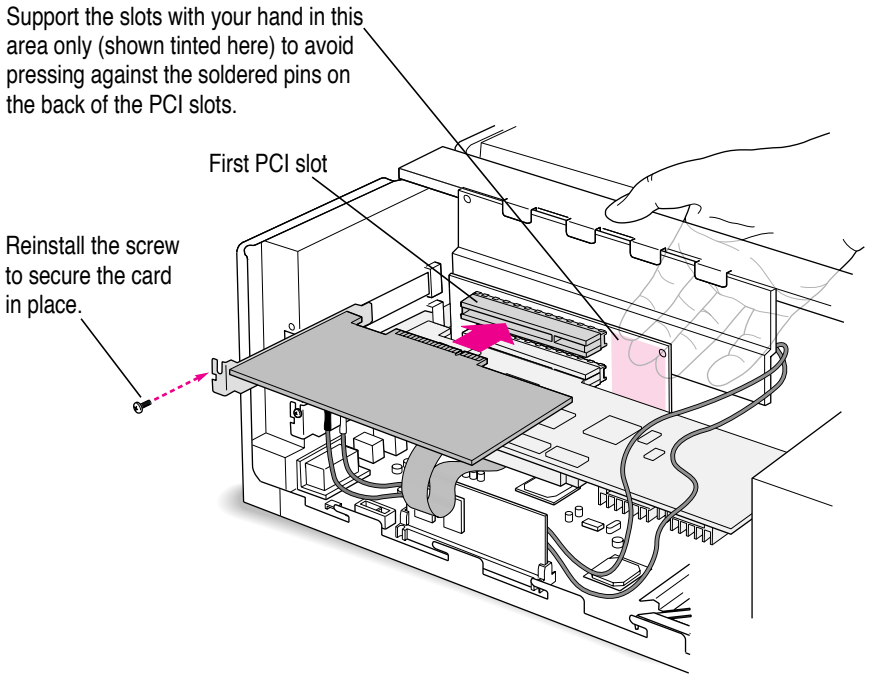
Inserting the PC Serial and Parallel Card

11 **Flip the PC Serial and Parallel Card over and insert it into the first (top) PCI slot.**

IMPORTANT Always hold the card by its edges. Don't touch any of the components on the card.

Place one hand behind the PCI slots in the area indicated below. With your other hand, align the card's connector end (gold in color) with the first (top) PCI expansion slot. The ports on the card should face the port access opening on the computer's back panel. Press the card in. When the card is fully inserted, you won't be able to see the gold-colored connector any more.

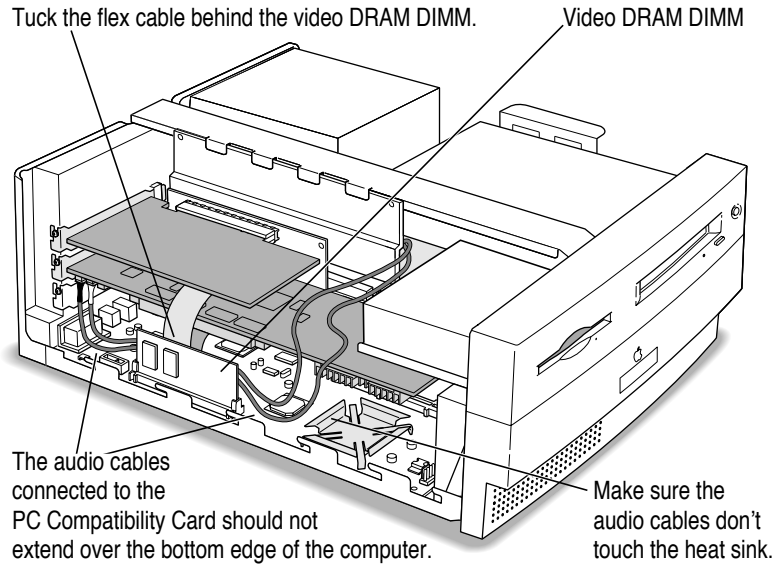
- Don't rock the card from side to side; press it straight into the slot. Rocking the card can damage the PCI slot.
- Don't force the card. If you meet a lot of resistance, pull the card out and try again.
- To see if the card is connected, pull it gently. If it resists, it is connected.


Support the slots with your hand in this area only (shown tinted here) to avoid pressing against the soldered pins on the back of the PCI slots.
First PCI slot
Reinstall the screw to secure the card in place.

12 **Reinsert the screws you removed earlier to secure both cards.**

13 **Tuck the audio cables as shown. If you have a 12-inch PC Compatibility Card, tuck the peripheral flex cable down as shown.**

If you are installing the PC Compatibility Card for the first time, return to the PC Compatibility Card user's manual now and complete the rest of the instructions for PC Compatibility Card installation.

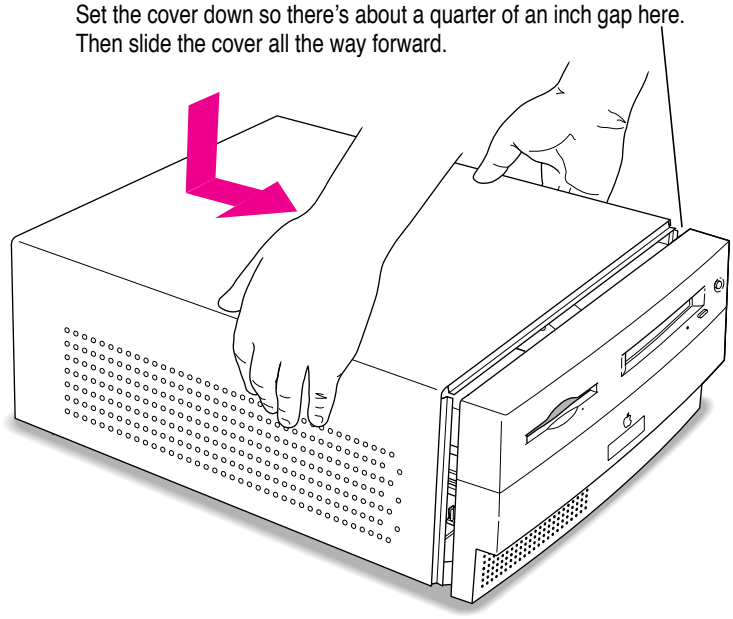

Tuck the flex cable behind the video DRAM DIMM.
Video DRAM DIMM
The audio cables connected to the PC Compatibility Card should not extend over the bottom edge of the computer.
Make sure the audio cables don't touch the heat sink.

Replacing the computer's cover

14 **Make sure all cables and cards are firmly connected.**

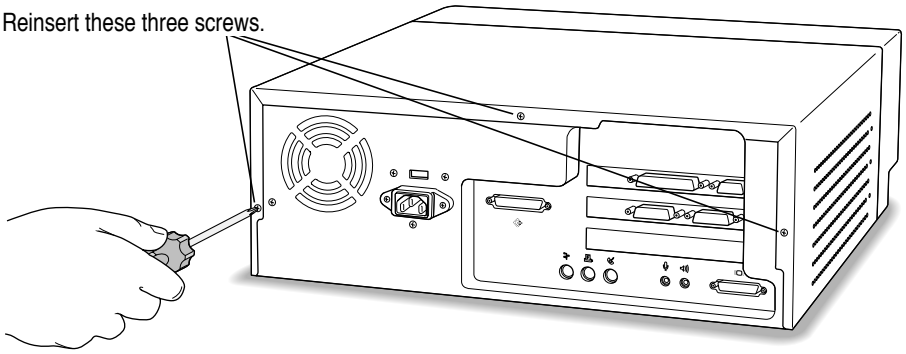
15 **Replace the computer cover.**

Lower the cover onto the computer vertically.



16 Replace the screws and reconnect all equipment.

Reinsert the three screws you removed earlier into the back of the computer. Then reinsert the power cable and all other equipment cables.



You are now finished installing your PC Serial and Parallel Card.

What's next?

Next, go to Chapter 6, "Updating Your PC Compatibility Card Software."

Then go to Chapter 7 for instructions on connecting equipment to your PC Serial and Parallel Card.

2 Installing the Card in a Power Macintosh 6400 or 6500

The illustrations in this chapter show the 6400 model. If you have a 6500 model, some of the illustrations may look slightly different from your computer, but the procedure is the same.

After you install the PC Serial and Parallel Card hardware, go to Chapter 6, "Updating Your PC Compatibility Card Software." Then turn to Chapter 7 to learn more about connecting PC-compatible equipment to your PC Serial and Parallel Card.

What you need

Before beginning the installation process, make sure you have all the necessary parts: the PC Serial and Parallel Card and the peripheral flex cable. You'll also need a Phillips screwdriver, your PC Compatibility Card user's manual, and a magazine that you can place the computer's logic board on.

Installing the PC Serial and Parallel Card hardware

WARNING The installation of the PC Serial and Parallel Card is technically complex. Unless you are comfortable installing components inside computers, Apple recommends that you have the PC Serial and Parallel Card installed by your Apple-authorized dealer (who may charge a fee). If you attempt to install the card yourself, any damage you may cause to your equipment will not be covered by the limited warranty on your computer.

Do not attempt to install the card or connect the cables without first reading this manual.

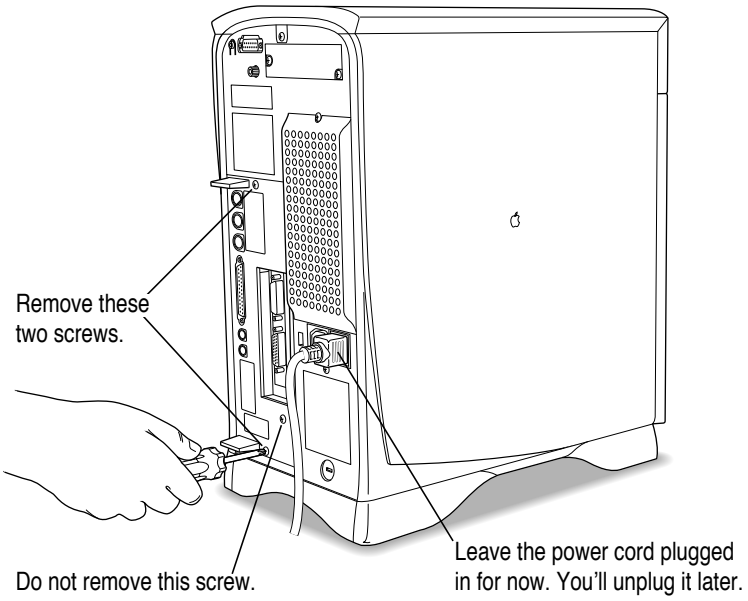
There are several steps to installing your PC Serial and Parallel Card hardware:

- opening the computer
- preparing the slots
- attaching the peripheral flex cable to the PC Compatibility Card
- inserting the PC Serial and Parallel Card
- attaching the peripheral flex cable to the PC Serial and Parallel Card
- replacing the logic board

Opening the computer

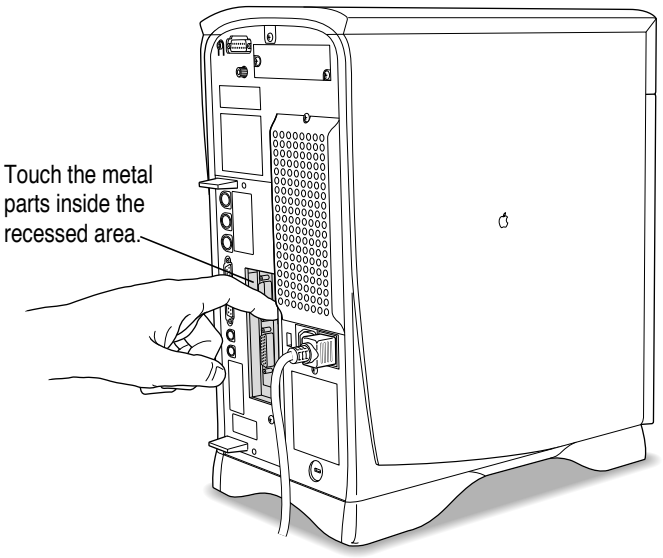
1 **Shut down the computer and disconnect all cables from the computer, except for the power cord.**

2 **Remove the two screws as shown from the computer's back panel.**



3 **Touch the recessed metal parts in the back panel to discharge static electricity from your body.**

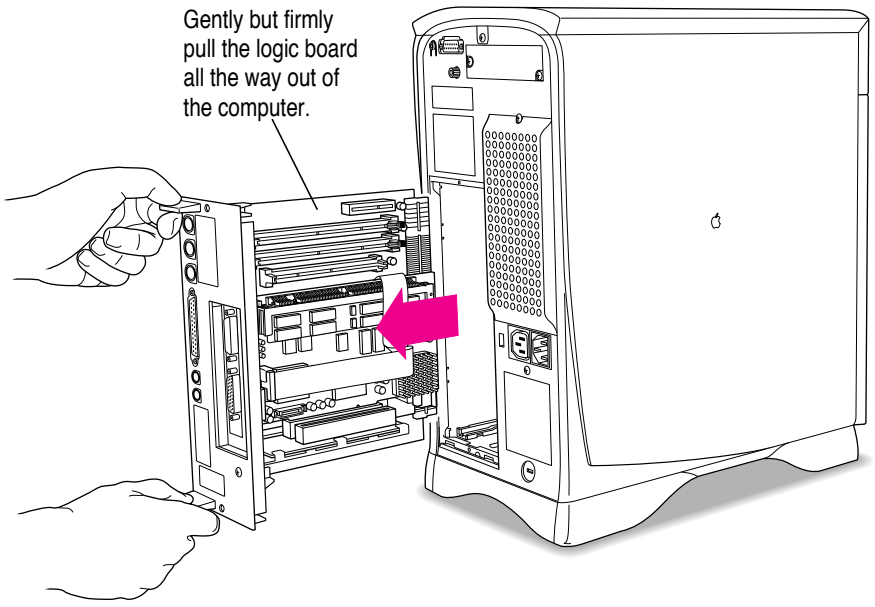
IMPORTANT You can collect static electricity just by walking away from and then back to your computer. If you need to move away from your computer during installation, remember to touch the metal part of the back panel again before you continue installing.



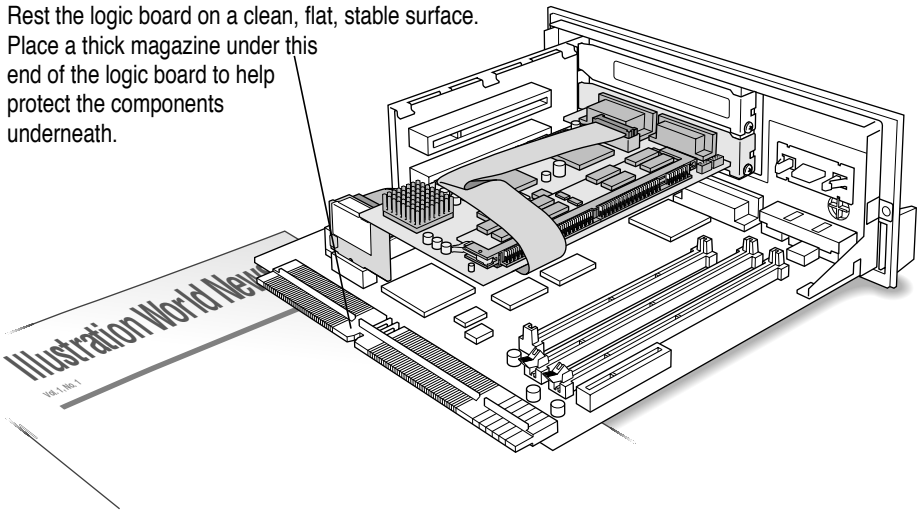
4 **Unplug the power cord from your computer.**

You can unplug the power cord now that you discharged static electricity from your body in the previous step.

5 **Grasping the two plastic tabs, gently pull the logic board all the way out of the computer.**



6 **Set the logic board on a clean, flat, stable surface.**


Rest the logic board on a clean, flat, stable surface. Place a thick magazine under this end of the logic board to help protect the components underneath.
Illustration World

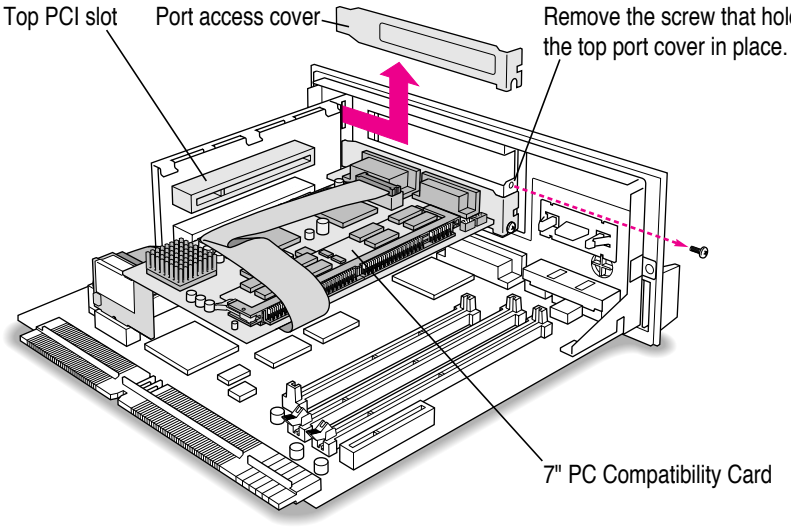
Preparing the slots

7 Unscrew and remove the port access covers for the slots you need.

If you are installing the PC Serial and Parallel Card at the same time you are installing a PC Compatibility Card, unscrew and remove the port access covers to the top two PCI slots.

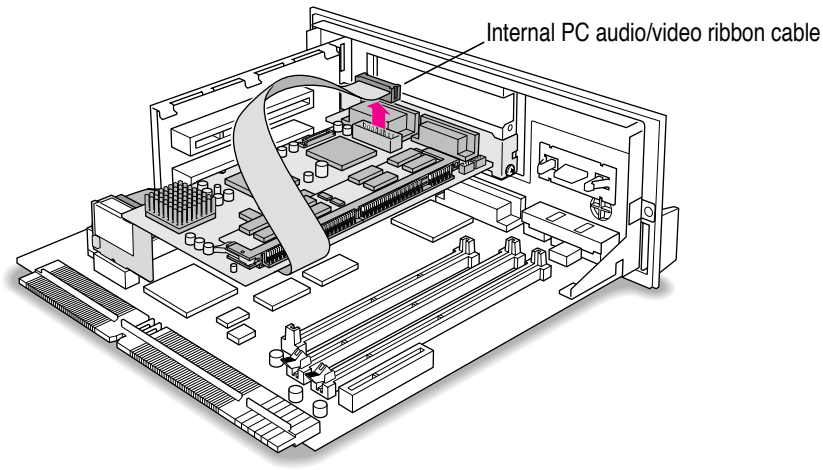
If you already have a PC Compatibility Card installed in your computer, then unscrew and remove the port access cover to the top slot.

Position your hand so that the screw and the port access cover do not fall onto the logic board.



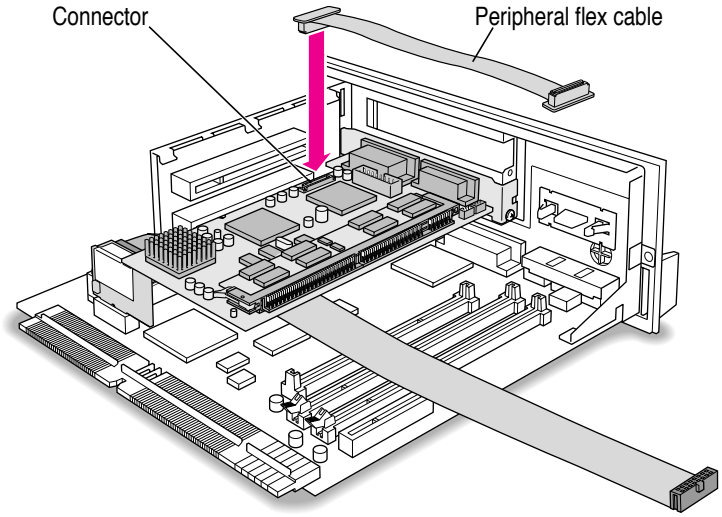
Attaching the peripheral flex cable to the PC Compatibility Card

8 **Disconnect the Internal PC audio/video ribbon cable from the PC Compatibility Card.**



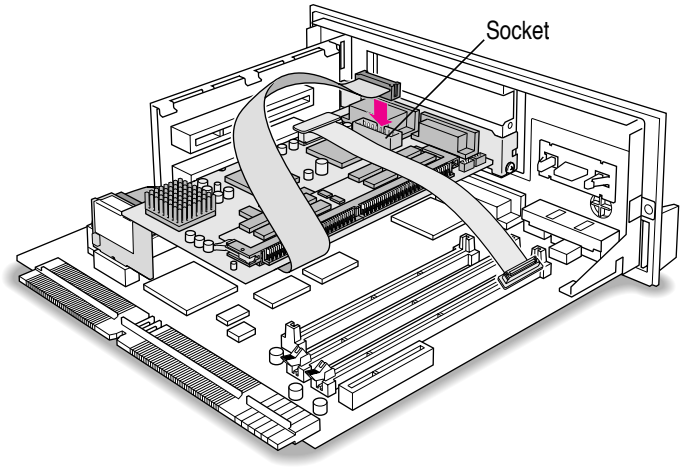
9 **Attach the peripheral flex cable as shown.**

Use the connector located near the PCI slot.



10 Reinstall the ribbon cable over the top of the peripheral flex cable.

Push the cable down a little to allow enough room for card installation.



Inserting the PC Serial and Parallel Card

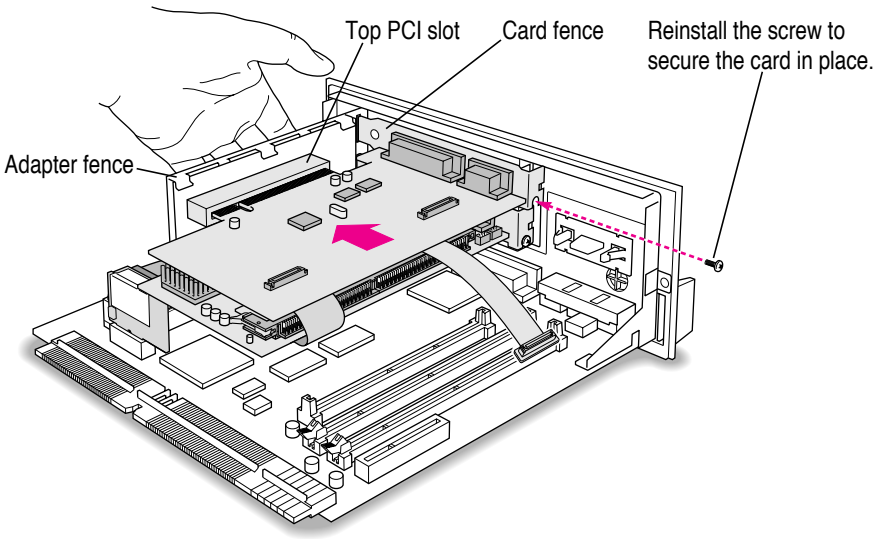
11 **Insert the card into the PCI slot so that the card fence faces the port access opening.**

IMPORTANT Always hold the card by its edges. Don't touch any of the components on the card.

12 **Supporting the adapter fence with one hand, push the card until it snaps into place.**

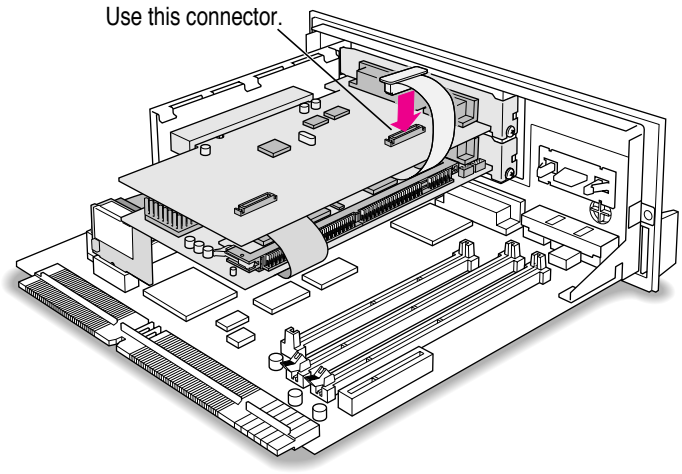
Press the card in firmly. If you meet resistance, pull the card out and try again. To see if the card is connected properly, make sure the card's metal fence is flush with the side of the port access cover.

- Don't rock the card from side to side; press it straight into the slot. Rocking the card can damage the PCI slot.
- Don't force the card. If you meet a lot of resistance, pull the card out and try again.



Attaching the peripheral flex cable to the PC Serial and Parallel Card

13 **Attach the peripheral flex cable to the connector located on the right side of the PC Serial and Parallel Card as shown.**



14 **Push the peripheral flex cable down.**

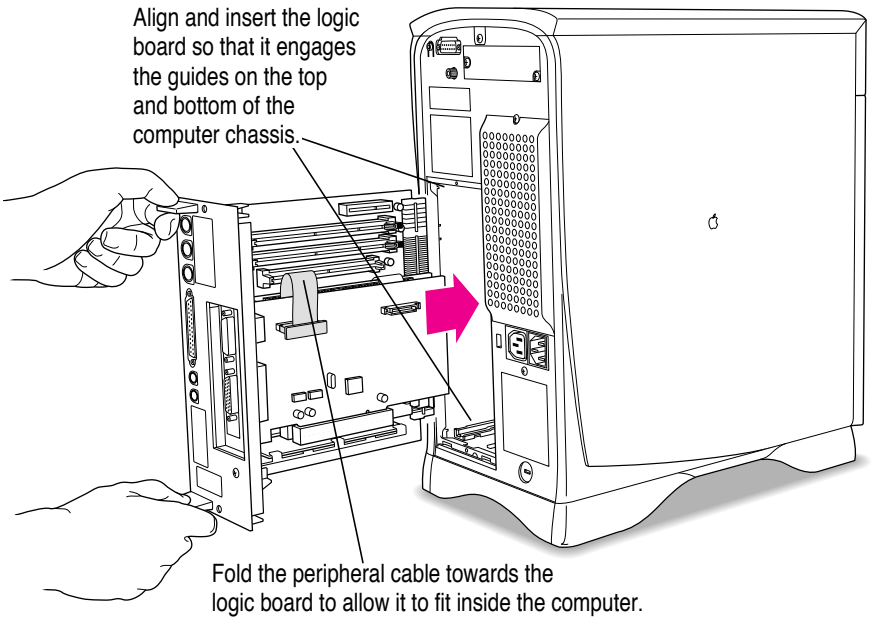
This allows room to reinstall the logic board in the computer.

15 **If you are installing the PC Compatibility Card for the first time, return to the PC Compatibility Card user's manual now for the rest of the instructions.**

16 **Make sure all cables and cards are firmly connected.**

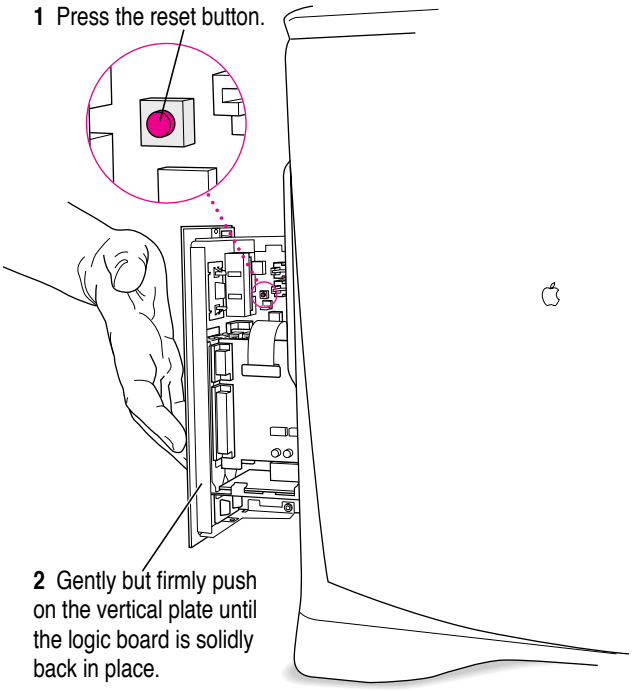
Replacing the logic board

17 **Align and insert the logic board part way into the computer.**


Align and insert the logic board so that it engages the guides on the top and bottom of the computer chassis.
Fold the peripheral cable towards the logic board to allow it to fit inside the computer.

18 **Press the reset button on the logic board and slide the logic board back into the computer.**

Note: When you press the reset button, some of your computer's software settings will change. You may want to open the control panels for the date and time, keyboard, and mouse to make sure that they are set the way you want.



19 **Reinsert screws to secure the logic board.**

20 **Reconnect the power cord.**

You are now finished installing the card.

What's next?

Next, go to Chapter 6, "Updating Your PC Compatibility Card Software."

Then go to Chapter 7 for instructions on connecting equipment to your PC Serial and Parallel Card.

3 Installing the Card in a Power Macintosh 7200, 7300, 7500, or 7600

Except where noted, the illustrations in this chapter show the 7200 model. If you have a 7300, 7500, or 7600 model, some of the illustrations may look slightly different from your computer, but the procedure is the same.

After you install the PC Serial and Parallel Card hardware, go to Chapter 6, "Updating Your PC Compatibility Card Software." Then turn to Chapter 7 to learn more about connecting PC-compatible equipment to your PC Serial and Parallel Card.

WARNING Shipping your computer with a PC Compatibility Card installed may cause damage to the card or to your computer. Your PC Compatibility Card should be shipped separately. (See your PC Compatibility Card user's manual for instructions on how to remove the card.)

What you need

Before beginning the installation process, make sure you have all the necessary parts: the PC Serial and Parallel Card and the peripheral flex cable. You'll also need a Phillips screwdriver and your PC Compatibility Card user's manual.

Installing the PC Serial and Parallel Card hardware

WARNING The installation of the PC Serial and Parallel Card is technically complex. Unless you are comfortable installing components inside computers, Apple recommends that you have the PC Serial and Parallel Card installed by your Apple-authorized dealer (who may charge a fee). If you attempt to install the card yourself, any damage you may cause to your equipment will not be covered by the limited warranty on your computer.

Do not attempt to install the card or connect the cables without first reading this manual.

There are several steps to installing your PC Serial and Parallel Card hardware:

- opening the computer
- opening the expansion card cover
- preparing the slots
- attaching the peripheral flex cable to the PC Compatibility Card
- inserting the PC Serial and Parallel Card
- attaching the peripheral flex cable to the PC Serial and Parallel Card
- replacing the expansion card cover
- replacing the computer cover

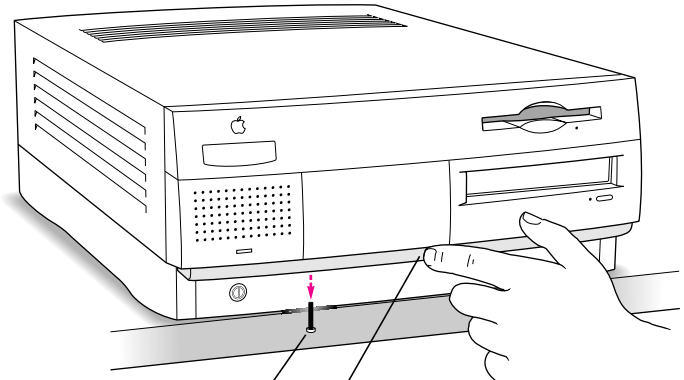
Opening the computer

1 **Shut down the computer and disconnect all cables from the computer, except for the power cord.**

Leave the computer plugged in for now, to ground it and protect its components from static electricity damage.

2 **If the security bar is installed, remove it by removing the screw under the front panel and pressing the center of the bar.**

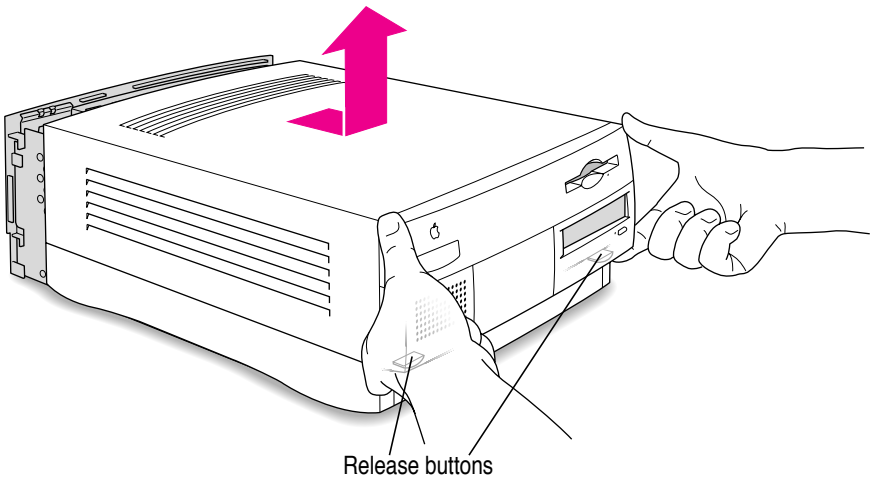
Note: The computer in the illustration is a Power Macintosh 7300. Not all computers come with or can accept a security bar. If your computer did not come with a security bar, skip this step.



3 Remove the cover from the computer.

Press the two release buttons under the front panel and slide the cover toward you approximately two inches.

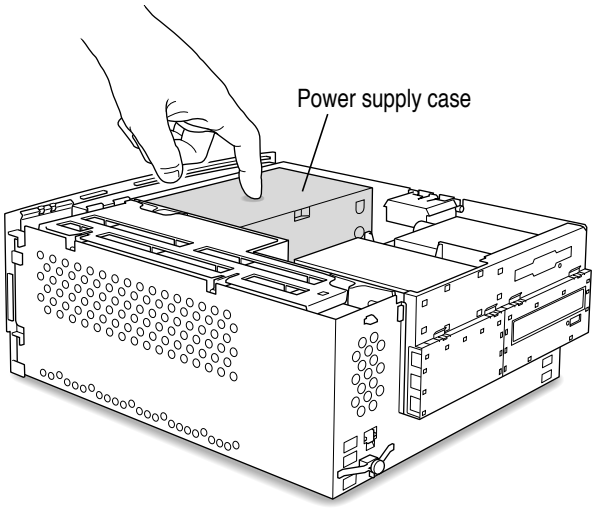
After you've slid the cover forward about two inches, lift it straight up and off the computer.



4 **Touch the metal part of the power supply case inside the computer.**

Always do this before you touch any parts, or install any components, inside the computer. Touching the power supply case helps release static electricity from your body and prevent possible damage to internal components.

IMPORTANT You can collect static electricity just by walking away from and then back to your computer. If you need to move away from your computer during installation, remember to touch the metal part of the power supply case again before you continue installing.

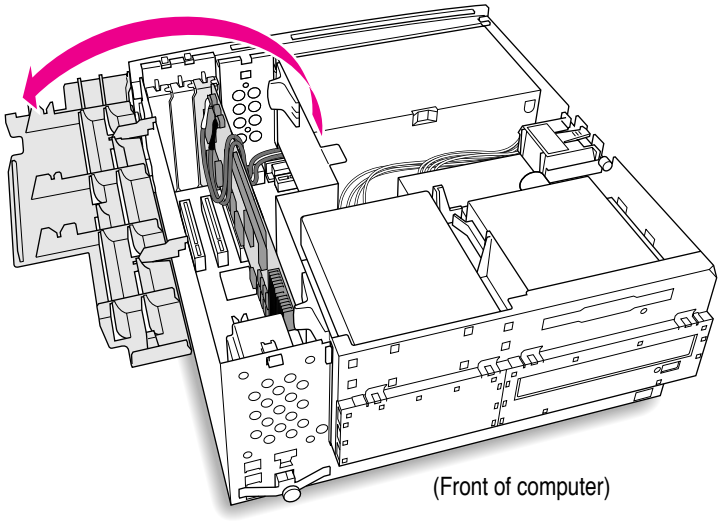


5 **Disconnect the power cord.**

You can unplug the power cord now that you discharged static electricity from your body in the previous step.

Opening the expansion card cover

6 **Flip open the expansion card cover.**

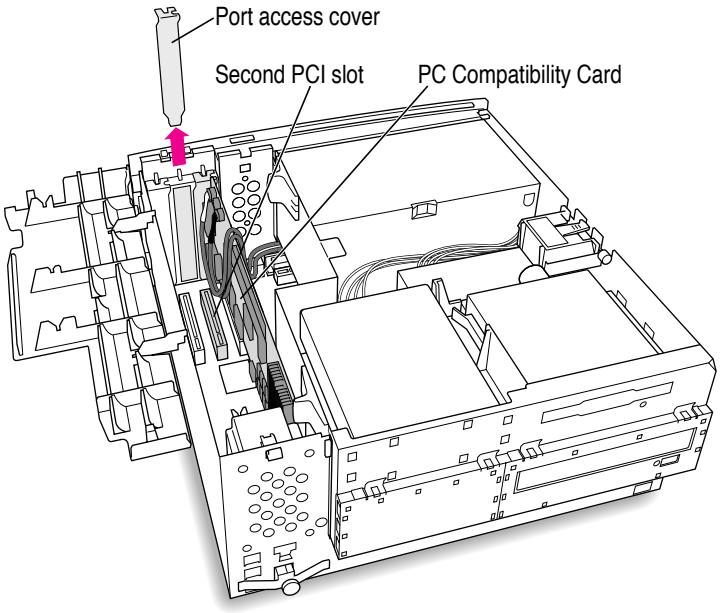


Preparing the slots

7 **Remove the metal port access covers for the slots you need.**

If you are installing the PC Serial and Parallel Card at the same time you are installing a PC Compatibility Card, remove the metal covers to the first two PCI slots.

If you already have a PC Compatibility Card installed in your computer, then unscrew and remove the metal covers to the second PCI slot.



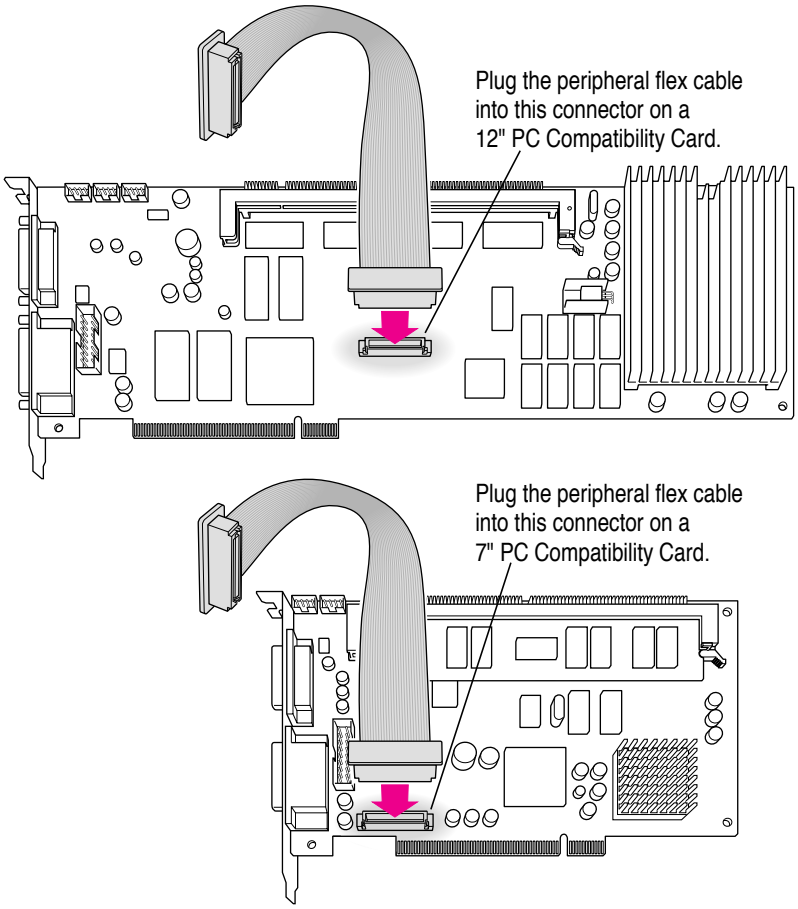
8 **If you have a card in the third PCI expansion slot, remove it.**

You will have more room to install your PC Serial and Parallel Card if the third slot is empty. See the user's manual that came with the card for instructions on how to remove it.

Attaching the peripheral flex cable to the PC Compatibility Card

9 **Attach the peripheral flex cable to the side of the PC Compatibility Card.**

Note: If you can't reach the connector on the 7-inch card, remove it without removing the audio cables. Then attach the peripheral flex cable and reinsert the card into the PCI slot.


Plug the peripheral flex cable into this connector on a 12" PC Compatibility Card.
Plug the peripheral flex cable into this connector on a 7" PC Compatibility Card.

Inserting the PC Serial and Parallel Card

10 **Align the card with the second expansion slot.**

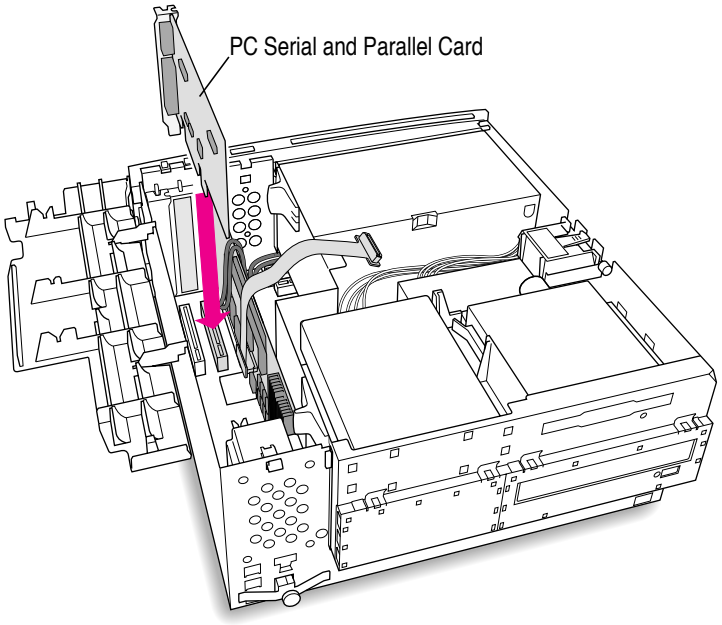
IMPORTANT Always hold the card by its edges. Don't touch any of the components on the card.

Align the card's connector end (gold in color) with the second PCI expansion slot.

11 **Insert the card.**

Press down on the card. When the card is fully inserted, you won't be able to see the gold-colored connector any more.

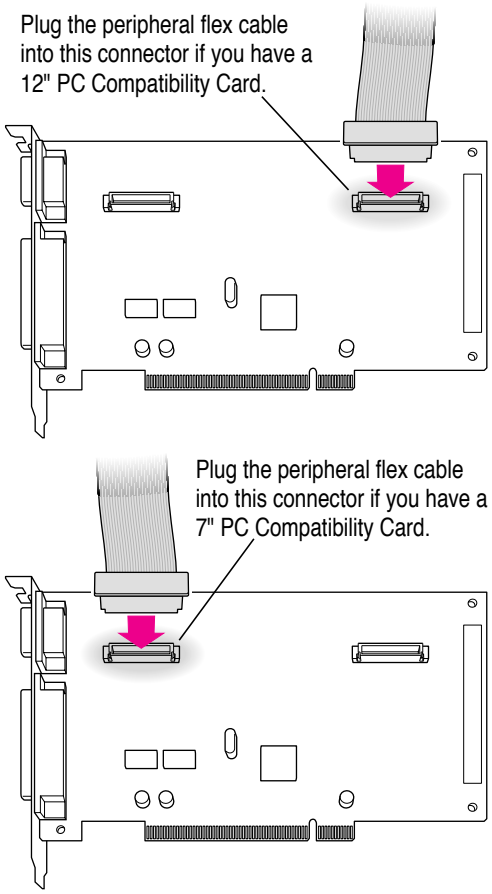
- Don't rock the card from side to side; press it straight into the slot. Rocking the card can damage the PCI slot.
- Don't force the card. If you meet a lot of resistance, pull the card out and try again.
- To see if the card is connected, pull it gently. If it resists, it is connected.



Attaching the peripheral flex cable to the PC Serial and Parallel Card

12 **Bend the peripheral flex cable and attach the cable to the connector as shown.**

Support the corner of the PC Serial and Parallel Card while you attach the peripheral flex cable.


Plug the peripheral flex cable into this connector if you have a 12" PC Compatibility Card.
Plug the peripheral flex cable into this connector if you have a 7" PC Compatibility Card.

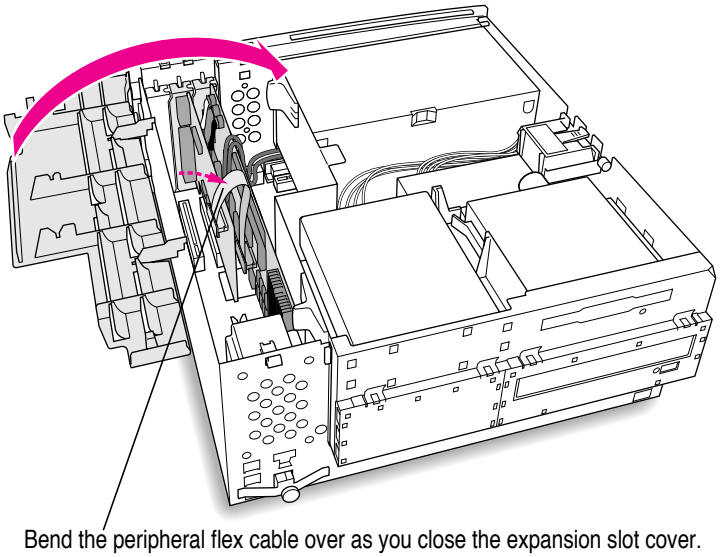
13 **If you removed a card from the third PCI expansion slot, reinsert it now.**

See the user's manual that came with your card for instructions on how to install it.

14 **If you removed your 7-inch PC Compatibility Card, see the user's manual that came with your card for instructions on how to route the cables inside your computer.**

Replacing the expansion card cover

15 **Push the peripheral flex cable gently so that it bends towards the PC Compatibility Card.**



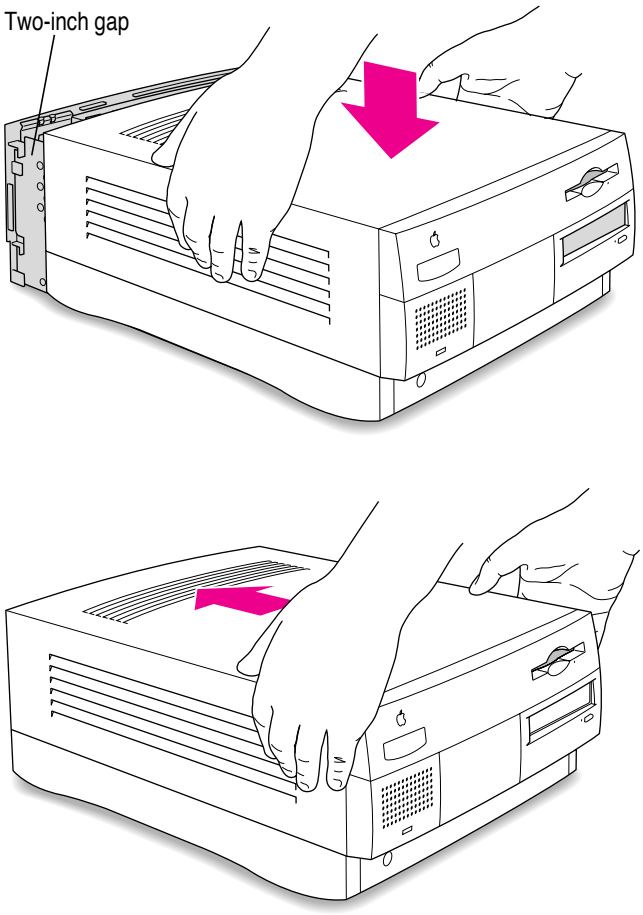
Bend the peripheral flex cable over as you close the expansion slot cover.

16 **Flip the expansion card cover up and snap it back into place. (Be sure to snap the cover back down on both ends.)**

Make sure no cables are in the way before you snap the cover into place.

Replacing the computer's cover

17 **Lower the cover onto the case, leaving a two-inch gap, and then push the cover back.**

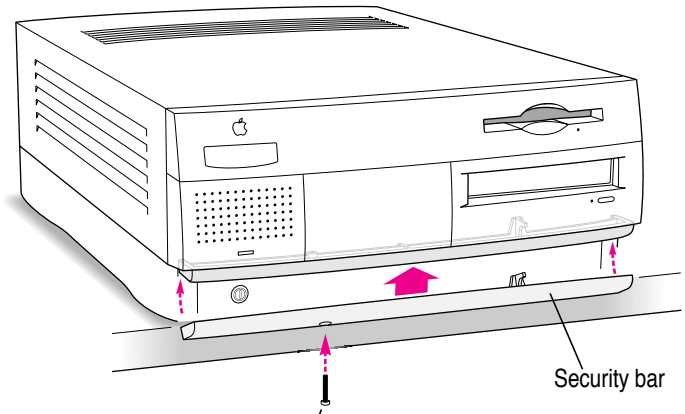


18 **If you removed the security bar earlier, replace it now.**

Note: The computer in the illustration is a Power Macintosh 7300. If your computer did not come with a security bar, skip this step.

Place the security bar under the front panel and tilt the bar so that the hook slides into the slot. Then reinsert the screw and tighten it into place.

IMPORTANT Do not overtighten the screw.



19 **Reconnect all equipment.**

Reinsert the power cord and all other equipment cables.

You are now finished installing the card.

What's next?

Next, go to Chapter 6, "Updating Your PC Compatibility Card Software."

Then go to Chapter 7 for instructions on connecting equipment to your PC Serial and Parallel Card.

4 Installing the Card in a Power Macintosh 8500 or 9500

The illustrations in this chapter show the 9500 model. If you have an 8500 model, some of the illustrations may look slightly different from your computer.

After you install the PC Serial and Parallel Card hardware, go to Chapter 6, "Updating Your PC Compatibility Card Software." Then turn to Chapter 7 to learn more about connecting PC-compatible equipment to your PC Serial and Parallel Card.

What you need

Before beginning the installation process, make sure you have all the necessary parts: the PC Serial and Parallel Card and the peripheral flex cable. You'll also need a flathead screwdriver and your PC Compatibility Card user's manual.

Installing the PC Serial and Parallel Card hardware

WARNING The installation of the PC Serial and Parallel Card is technically complex. Unless you are comfortable installing components inside computers, Apple recommends that you have the PC Serial and Parallel Card installed by your Apple-authorized dealer (who may charge a fee). If you attempt to install the card yourself, any damage you may cause to your equipment will not be covered by the limited warranty on your computer.

Do not attempt to install the card or connect the cables without first reading this manual.

There are several steps to installing your PC Serial and Parallel Card hardware:

- opening the computer
- preparing the slots
- attaching the peripheral flex cable to the PC Compatibility Card
- inserting the PC Serial and Parallel Card
- attaching the peripheral flex cable to the PC Serial and Parallel Card
- replacing the computer cover

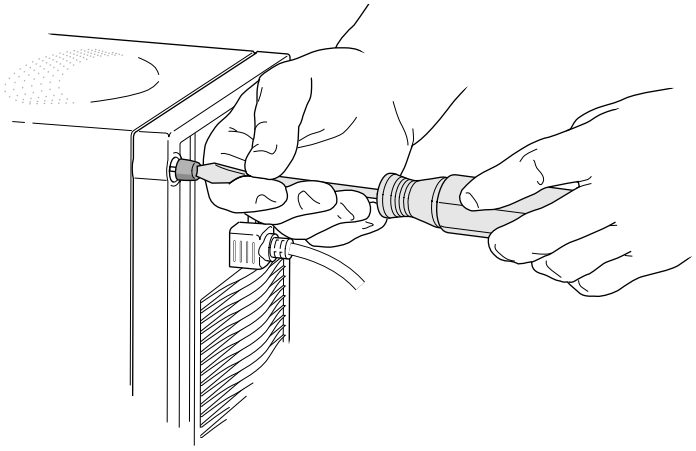
Opening the computer

1 **Disconnect all the cables from the computer, except for the power cord.**

Leave the computer plugged in for now, to ground it and protect its components from static electricity damage.

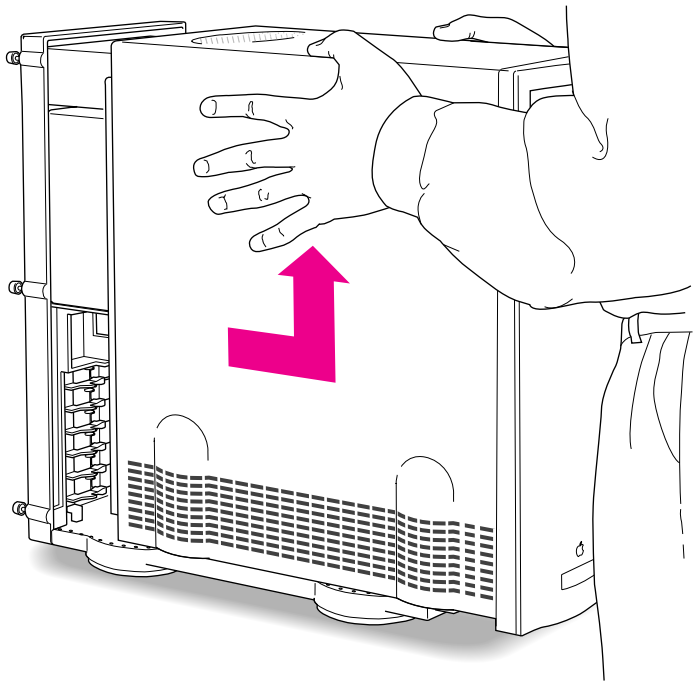
2 **Loosen the large screws on the back panel.**

If you have a Power Macintosh 8500, there are four screws, one at each corner of the back panel. If you have a Power Macintosh 9500, there are six screws, one at each corner and two on the sides of the back panel. Do not completely remove the screws or the back panel.



3 Remove the cover from the computer.

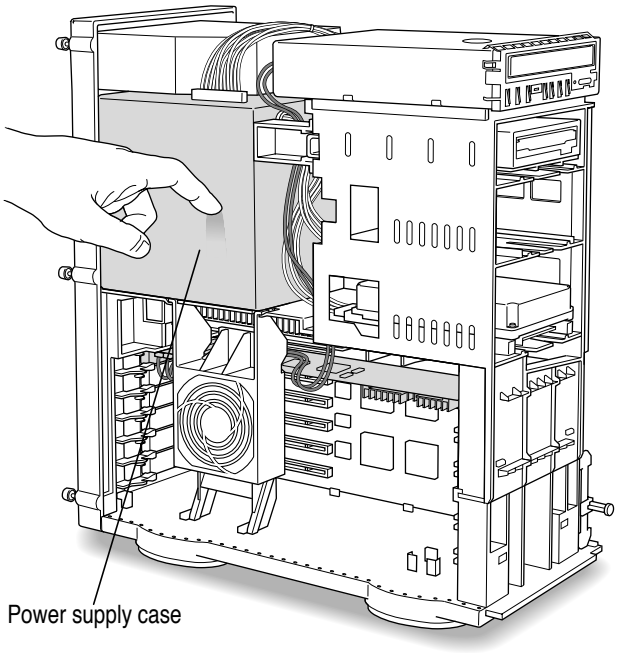
Slide the cover away from the back panel about two inches. Then raise the cover straight up and off the computer.



4 Touch the metal part of the power supply case inside the computer.

Always do this before you touch any parts, or install any components, inside the computer. Touching the power supply case helps release static electricity from your body and prevent possible damage to internal components.

IMPORTANT You can collect static electricity just by walking away from and then back to your computer. If you need to move away from your computer during installation, remember to touch the metal part of the power supply case again before you continue installing.

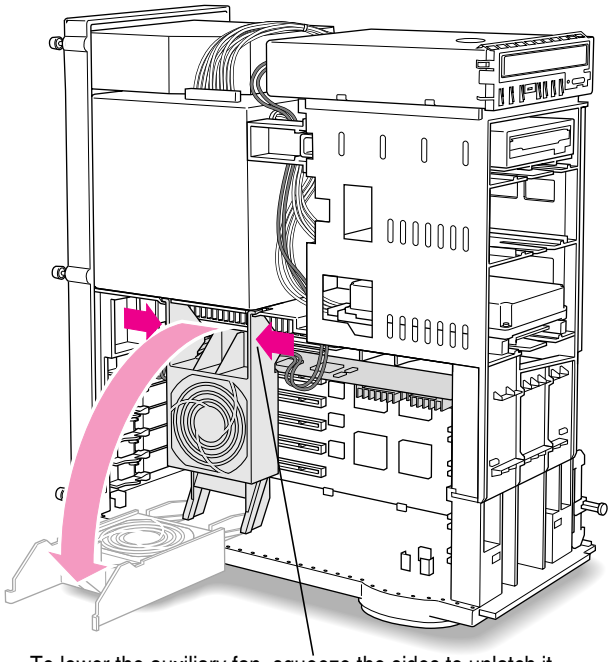


5 Disconnect the power cord from the back of the computer.

You can unplug the power cord now that you discharged static electricity from your body in the previous step.

6 Lower the retainer or auxiliary fan.

A Power Macintosh 9500 has an auxiliary fan; a Power Macintosh 8500 has a retainer.



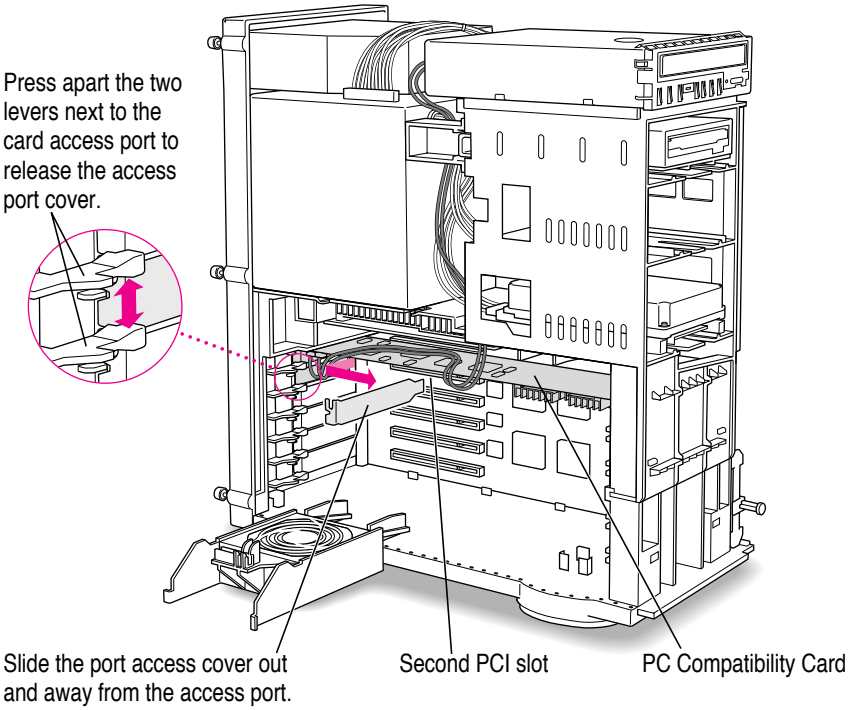
To lower the auxiliary fan, squeeze the sides to unlatch it.

Preparing the slots

7 **Remove the metal port access covers for the slots you need.**

If you are installing the PC Serial and Parallel Card at the same time you are installing a PC Compatibility Card, pull out the port access cover behind the expansion slot closest to the center of the computer. Then pull out the port access cover behind the second PCI expansion slot.

If you already have a PC Compatibility Card installed in your computer, leave it in place and pull out the port access cover behind the second PCI expansion slot.


Press apart the two levers next to the card access port to release the access port cover.
Slide the port access cover out and away from the access port.
Second PCI slot
PC Compatibility Card

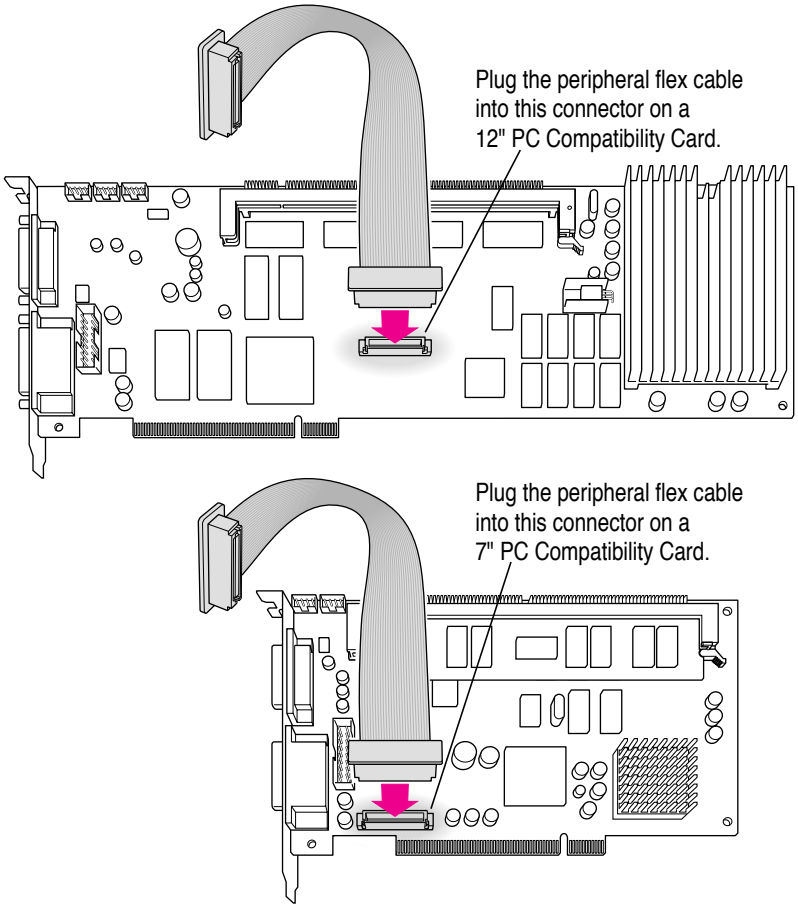
8 **If you have a card in the third PCI expansion slot, remove it.**

You will have more room to install your PC Serial and Parallel Card if the third slot is empty. See the user's manual that came with the card for instructions on how to remove it.

Attaching the peripheral flex cable to the PC Compatibility Card

9 **Attach the peripheral flex cable as shown.**

If you have trouble attaching the peripheral flex cable, remove the PC Compatibility Card (but do not remove the audio cables). If you have a Power Macintosh 9500, you can remove additional cards to make more room to maneuver.


Plug the peripheral flex cable into this connector on a 12" PC Compatibility Card.
Plug the peripheral flex cable into this connector on a 7" PC Compatibility Card.

10 **If you removed the PC Compatibility Card to attach the peripheral flex cable, then reinsert it now.**

Tuck the audio cables on top of the card.

Inserting the PC Serial and Parallel Card

11 **Align the PC Serial and Parallel Card with the second expansion slot.**

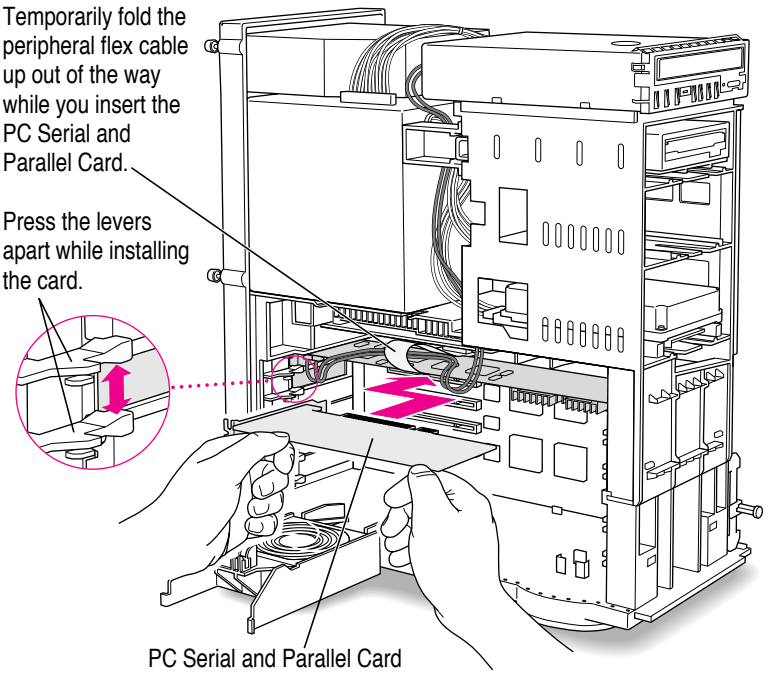
IMPORTANT Always hold the card by its edges. Don't touch any of the components on the card.

Align the card's connector end (gold in color) with the second PCI expansion slot. The ports on the card should face the port access opening on the computer's back panel.

12 **Insert the card.**

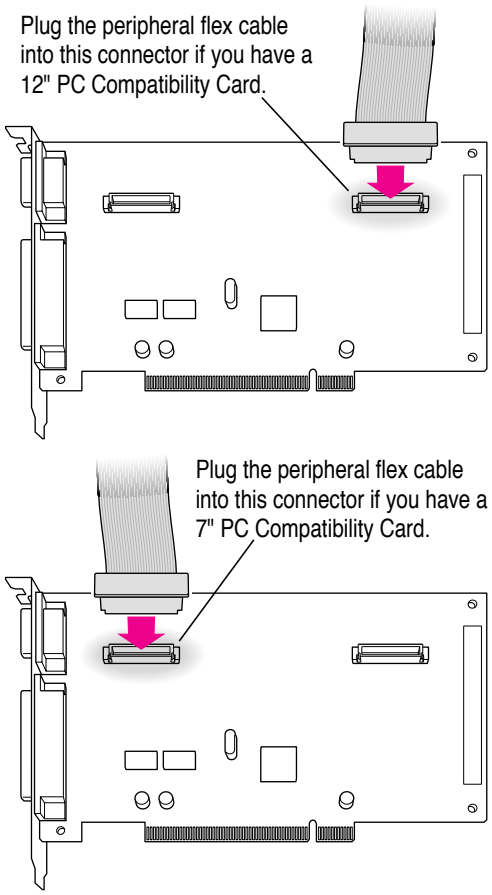
Press the card firmly into the slot. When the card is fully inserted, you won't be able to see the gold-colored connector any more.

- Don't rock the card from side to side; press it straight into the slot. Rocking the card can damage the PCI slot.
- Don't force the card. If you meet a lot of resistance, pull the card out and try again.
- To see if the card is connected, pull it gently. If it resists, it is connected.


Temporarily fold the peripheral flex cable up out of the way while you insert the PC Serial and Parallel Card.
Press the levers apart while installing the card.
PC Serial and Parallel Card

Attaching the peripheral flex cable to the PC Serial and Parallel Card

13 **Carefully bend the peripheral flex cable and insert it into the connector located on the PC Serial and Parallel Card as shown.**


Plug the peripheral flex cable into this connector if you have a 12" PC Compatibility Card.
Plug the peripheral flex cable into this connector if you have a 7" PC Compatibility Card.

14 **Reinsert any cards you removed.**

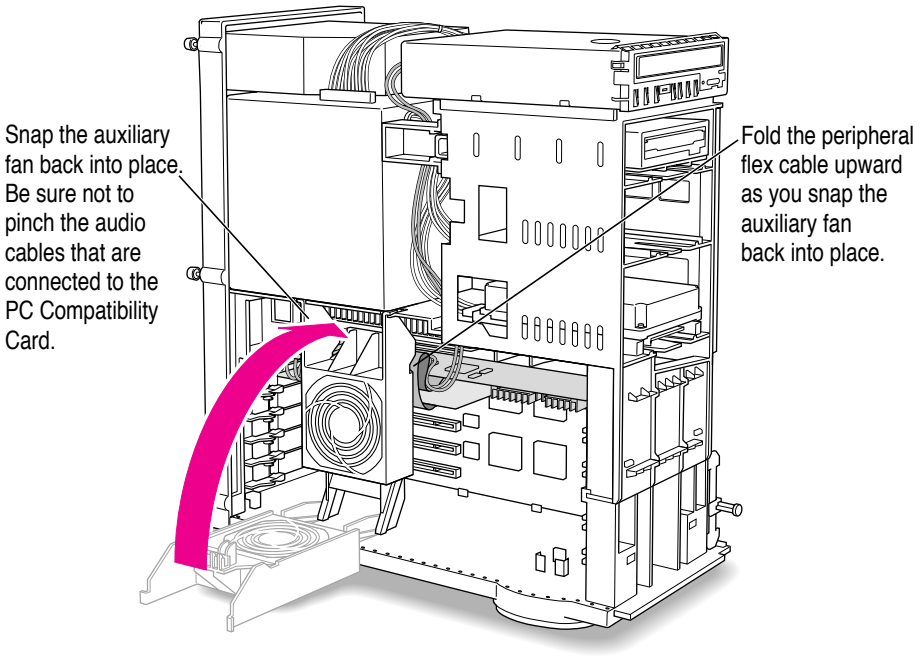
15 **If you are installing the PC Compatibility Card for the first time, return to the PC Compatibility Card user's manual now to finish the card's installation.**

Replacing the computer's cover

16 **Tuck the audio cables in on top of the PC Compatibility Card, so that they're out of the way of the retainer or auxiliary fan.**

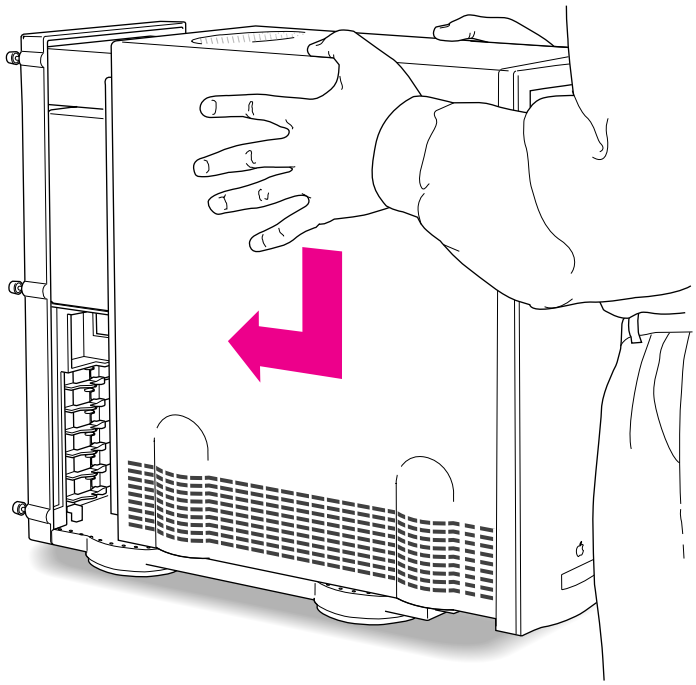
17 **Replace the retainer or fan.**

Make sure no cables are squeezed between the retainer or fan and the top of the card.


Snap the auxiliary fan back into place. Be sure not to pinch the audio cables that are connected to the PC Compatibility Card.
Fold the peripheral flex cable upward as you snap the auxiliary fan back into place.

18 **Replace the cover on the computer.**

Lower the cover all the way down onto the case. Push the cover back until it touches the back panel.



19 **Tighten the screws on the back panel and reconnect the power cord and other cables.**

You are now finished installing the card.

What's next?

Next, go to Chapter 6, "Updating Your PC Compatibility Card Software."

Then go to Chapter 7 for instructions on connecting equipment to your PC Serial and Parallel Card.

5 Installing the Card in a Power Macintosh 8600 or 9600

The illustrations in this chapter show the 8600 model. If you have a 9600 model, some of the illustrations may look slightly different from your computer.

After you install the PC Serial and Parallel Card hardware, go to Chapter 6, "Updating Your PC Compatibility Card Software." Then turn to Chapter 7 to learn more about connecting PC-compatible equipment to your PC Serial and Parallel Card.

What you need

Before beginning the installation process, make sure you have all the necessary parts: the PC Serial and Parallel Card and the peripheral flex cable. You'll also need a Phillips screwdriver and your PC Compatibility Card user's manual.

Installing the PC Serial and Parallel Card hardware

WARNING The installation of the PC Serial and Parallel Card is technically complex. Unless you are comfortable installing components inside computers, Apple recommends that you have the PC Serial and Parallel Card installed by your Apple-authorized dealer (who may charge a fee). If you attempt to install the card yourself, any damage you may cause to your equipment will not be covered by the limited warranty on your computer.

Do not attempt to install the card or connect the cables without first reading this manual.

There are several steps to installing your PC Serial and Parallel Card hardware:

- opening the computer
- preparing the slots
- attaching the peripheral flex cable to the PC Compatibility Card
- inserting the PC Serial and Parallel Card
- attaching the peripheral flex cable to the PC Serial and Parallel Card
- replacing the computer cover

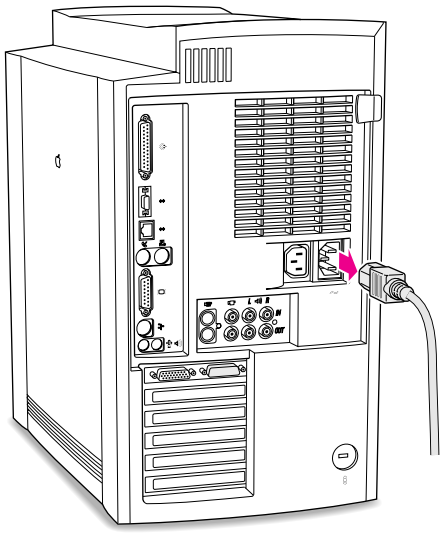
Opening the computer

1 **If your computer is turned on, shut it down and wait 20 minutes.**

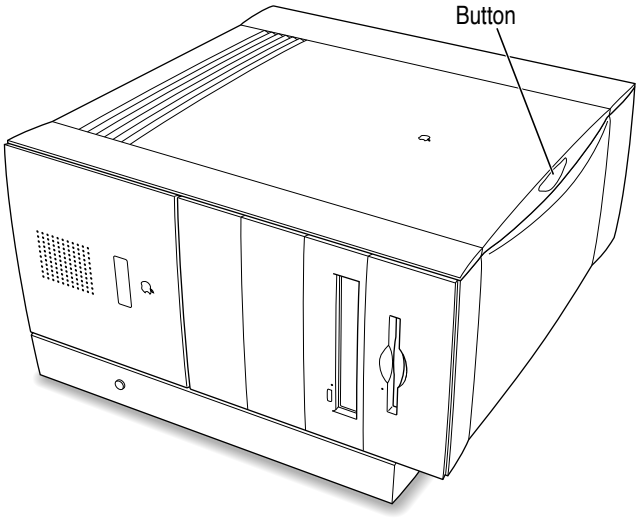
Before proceeding with these instructions, you need to allow the computer's internal components to cool.

2 **Disconnect all the cables from the computer, including the power cord.**

Remove the power cord now so you don't pull it by accident as you turn the computer on its side in the next step. You'll reconnect the power cord in step 4.

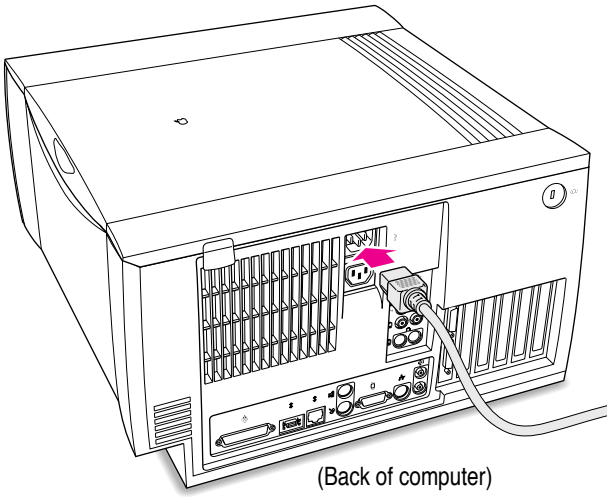


3 **Carefully lay the computer on its side with the cover and release button facing up.**



4 **Reconnect the power cord.**

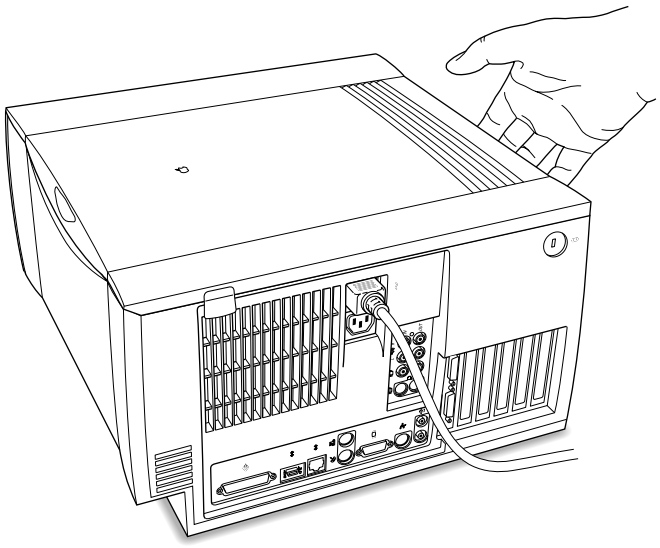
Connect the power cord to your computer and to an electrical outlet. This helps protect the computer from damage caused by static electricity.



5 **Touch the metal on the bottom of the computer.**

Always do this before you touch any parts, or install any components, inside the computer. Touching the metal helps release static electricity from your body and prevent possible damage to internal components.

IMPORTANT You can collect static electricity just by walking away from and then back to your computer. If you need to move away from your computer during installation, remember to touch the metal bottom again before you continue installing.

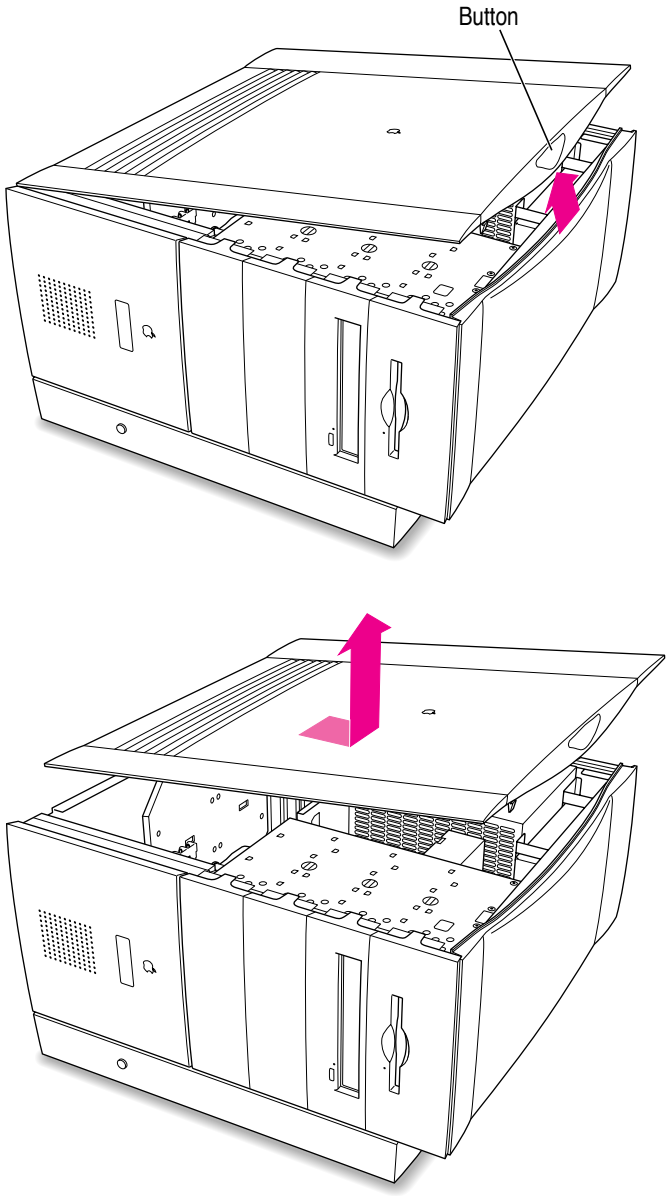


6 **Disconnect the power cord again.**

You can unplug the power cord now that you discharged static electricity from your body in the previous step.

7 Remove the computer's cover.

Press the release button and lift the cover a few inches. Then slide the cover to the right and lift it off.



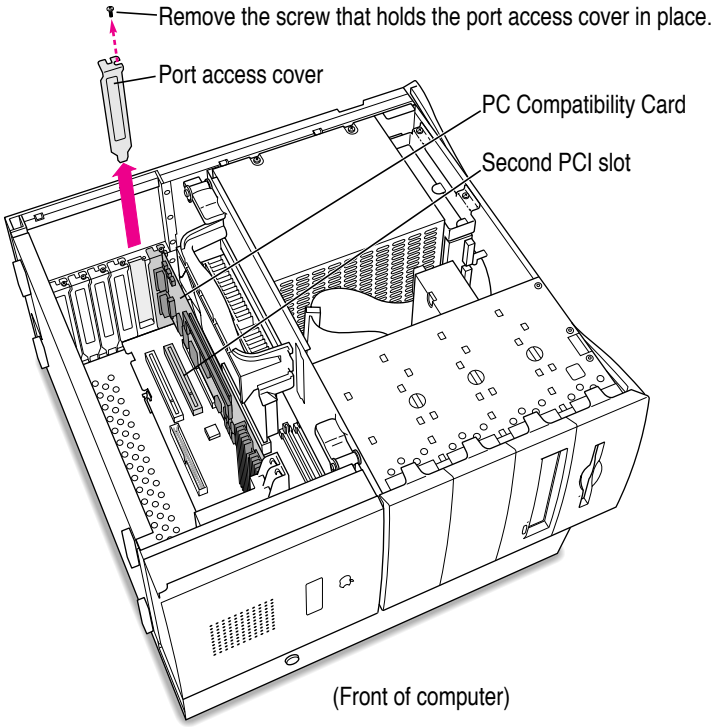
Preparing the slots

8 **Unscrew and remove the metal port access covers for the slots you need.**

If you are installing the PC Serial and Parallel Card at the same time you are installing a PC Compatibility Card, unscrew and remove the port access covers to the first two PCI expansion slots.

If you already have a PC Compatibility Card installed in your computer, leave it in place. Unscrew and remove the port access cover to the second PCI expansion slot.

Keep the screws; you will reinsert them later.


Remove the screw that holds the port access cover in place.
Port access cover
PC Compatibility Card
Second PCI slot
(Front of computer)

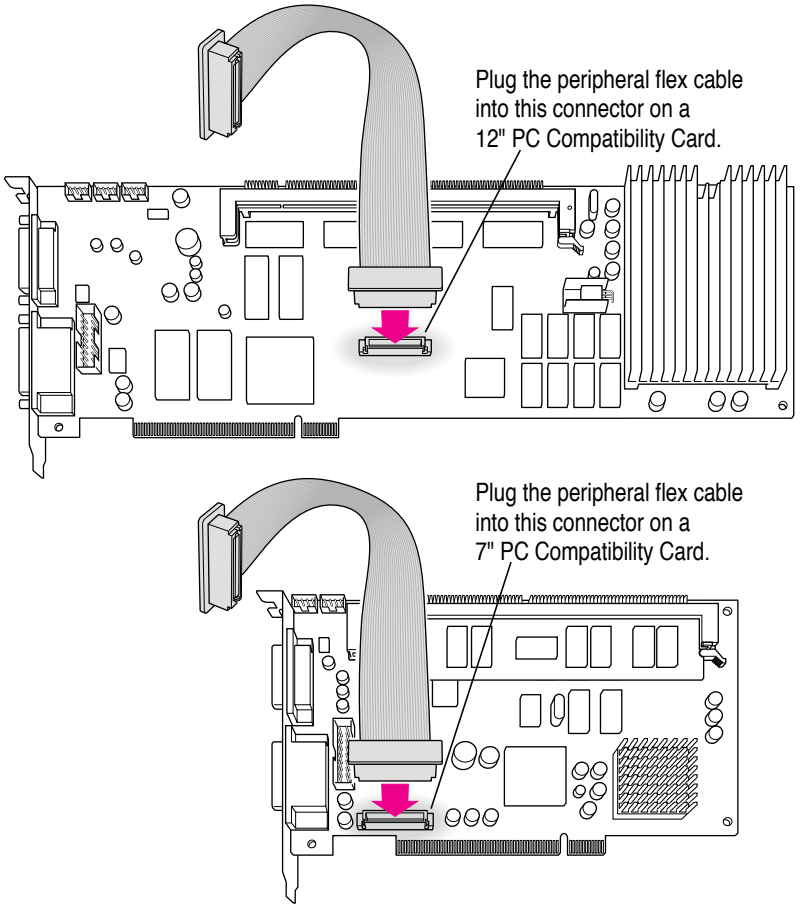
9 **If you have a card in the third PCI expansion slot, remove it.**

You will have more room to install your PC Serial and Parallel Card if the third slot is empty. See the user's manual that came with the card for instructions on how to remove it.

Attaching the peripheral flex cable to the PC Compatibility Card

10 **Attach the peripheral flex cable as shown.**

Use the connector shown in the illustration.


Plug the peripheral flex cable into this connector on a 12" PC Compatibility Card.
Plug the peripheral flex cable into this connector on a 7" PC Compatibility Card.

Inserting the PC Serial and Parallel Card

11 **Align the PC Serial and Parallel Card with the second expansion slot.**

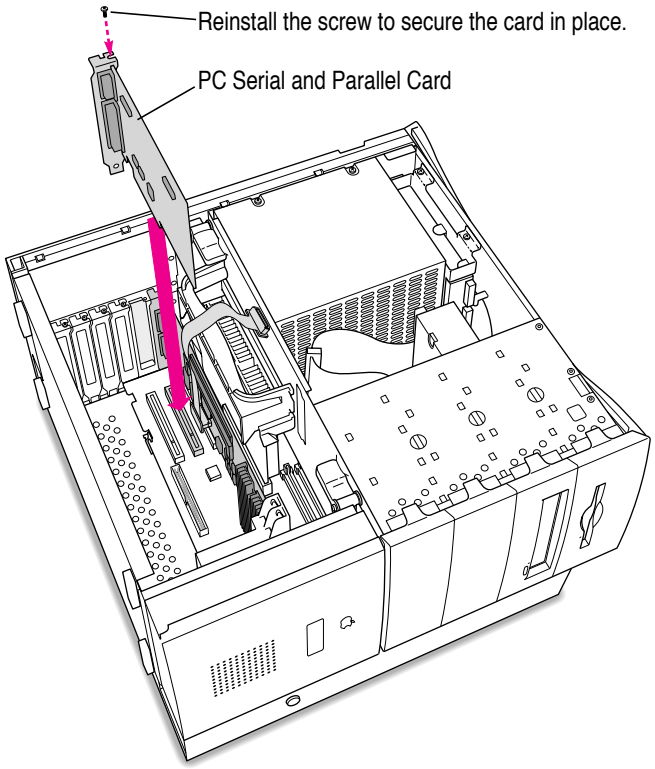
IMPORTANT Always hold the card by its edges. Don't touch any of the components on the card.

Align the card's connector end (gold in color) with the second PCI expansion slot. The ports on the card should face the port access opening on the computer's back panel.

12 Insert the card.

Press down on the card. When the card is fully inserted, you won't be able to see the gold-colored connector any more.

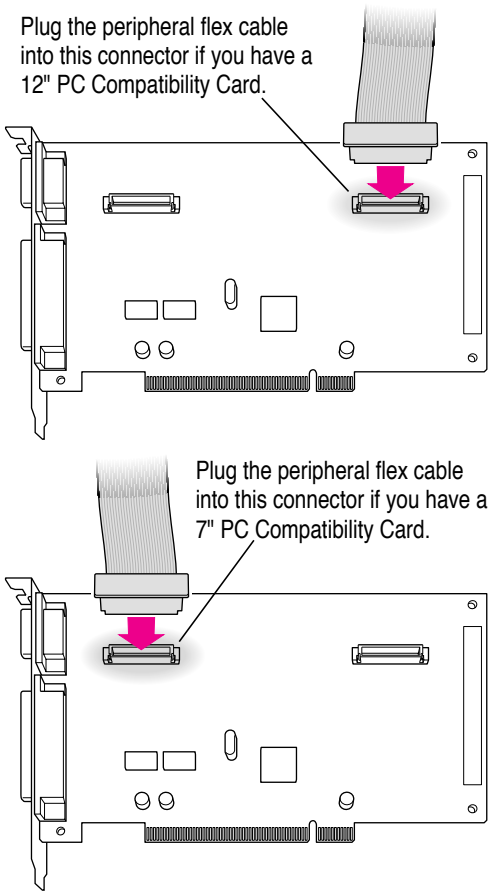
- Don't rock the card from side to side; press it straight into the slot. Rocking the card can damage the PCI slot.
- Don't force the card. If you meet a lot of resistance, pull the card out and try again.
- To see if the card is connected, pull it gently. If it resists, it is connected.



13 Reinsert the screw to secure the card in place.

Attaching the peripheral flex cable to the PC Serial and Parallel Card

14 **Carefully bend the peripheral flex cable and attach it to the connector located on the PC Serial and Parallel Card as shown.**


Plug the peripheral flex cable into this connector if you have a 12" PC Compatibility Card.
Plug the peripheral flex cable into this connector if you have a 7" PC Compatibility Card.

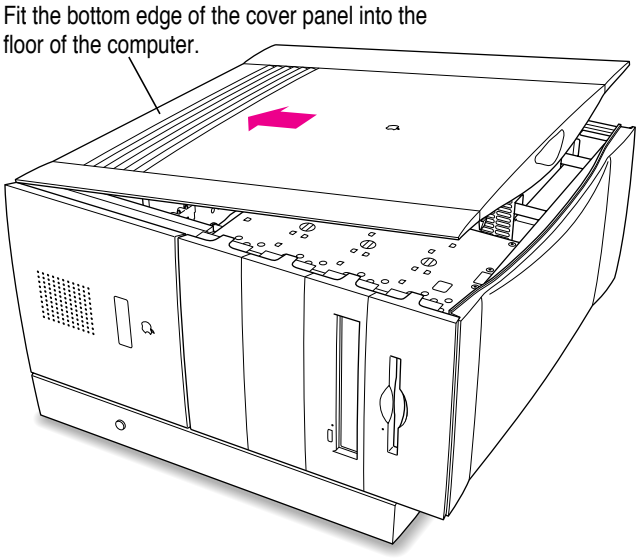
15 **Reinsert any cards you removed.**

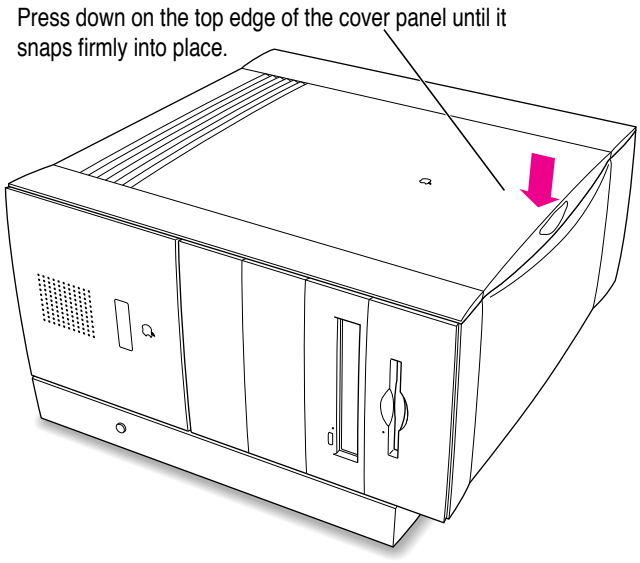
16 **If you are installing the PC Compatibility Card for the first time, return to the PC Compatibility Card user's manual now to finish the card's installation.**

Replacing the computer's cover

17 Replace the computer cover.

Align the bottom edge of the cover panel with the computer as shown below. Then press down on the cover panel until it snaps into place.





18 **Lift up the computer so that it sits upright.**

19 **Reconnect the power cord and any other cables.**

You are now finished installing the card.

What's next?

Next, go to Chapter 6, "Updating Your PC Compatibility Card Software."

Then go to Chapter 7 for instructions on connecting equipment to your PC Serial and Parallel Card.

6 Updating Your PC Compatibility Card Software

Once your PC Serial and Parallel Card is installed, you need to update your PC Compatibility Card Software.

The PC floppy disk and Mac OS CD-ROM disc that came with your PC Serial and Parallel Card contain the necessary software for using the card.

Updating the Windows/DOS PC Compatibility software

IMPORTANT If you have not previously installed the PC Compatibility Card software and created a drive container, see your PC Compatibility Card user's manual and create a drive container before you proceed.

1. **If necessary, switch to the PC environment.**

   To switch to the PC environment from the Mac OS, open the PC Setup control panel and click "Switch to PC."

2. **Insert the *PC Software–PC Compatibility Card* floppy disk.**

3. **In Windows, choose Run from the File menu. In Windows 95, click the Start button; then choose Run from the menu that appears.**

4. **In the dialog box that appears, type the following:**

   `A:\SETUP <return>`

5. **Follow the instructions that appear on the screen.**

   The recommended directory to install files in is C:\APPLE.

6. **When updating is complete, press ⌘-E to eject the floppy disk.**

7. **Restart the PC.**

   If you have Windows 95, click the Start button; then select Shutdown. A dialog box appears. Select Restart and then click OK.

   If you have Windows 3.1, first exit Windows. Then press Control-Alt-⌦ at the DOS prompt. If you do not have a ⌦ key, then press Control-Alt-. at the DOS prompt.

   To restart DOS, quit any open applications. Then press Control-Alt-⌦ or Control-Alt-. at the DOS prompt.

   Next you must update the Mac OS PC Compatibility software. Follow the steps in the next section.

Updating the Mac OS PC Compatibility software

To update the Mac OS PC Compatibility software so it supports your PC Serial and Parallel Card, follow these steps:

1. **Insert the *PC Compatibility Card–Mac OS Software CD* into the CD-ROM drive.**

   If necessary, double-click the CD-ROM icon to open it.

2. **Double-click the PC Compatibility Software folder to open it.**

3. **Double-click the Installer icon in the PC Compatibility folder.**

   A message appears describing the Installer software. Click OK.

   The Installer window appears.

4. **Make sure the disk named in the box is the one on which you want to install software.**

   If not, click Switch Disk until the correct disk name appears.

5. **Click Install.**

   The software is automatically installed on your hard disk.

6. **When the installation is complete, follow the instructions on the screen to quit the Installer and restart your computer.**

7 Connecting PC-Compatible Equipment

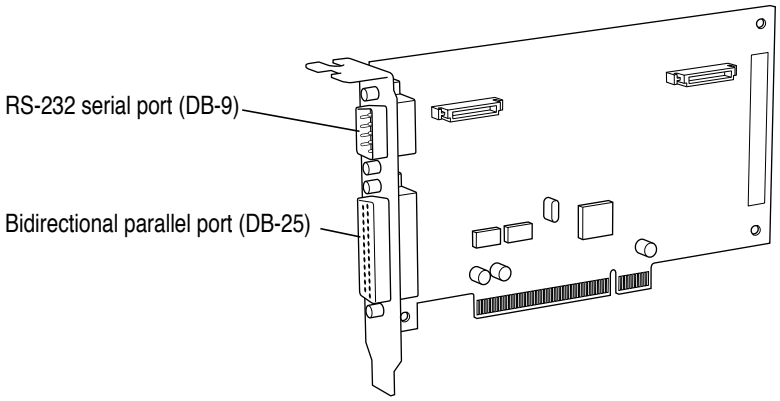
Your PC Serial and Parallel Card is used in conjunction with a PC Compatibility Card. When both are installed, you can connect a printer, modem, image scanner, digital camera, security dongle, or other PC-compatible device to the serial or parallel port on the card. Before you connect any device to the card, be sure to read the user's manual provided with your PC-compatible equipment.

What you can connect

The equipment you connect to your PC Serial and Parallel Card can be used from within the DOS or Windows environment. You cannot access equipment connected to the PC Serial and Parallel Card from the Mac OS. See the manual that came with your equipment for specific instructions on how to connect the equipment to a PC-compatible computer and how to set up, install, and use any software that is supplied with the equipment.

The RS-232 serial port on your PC Serial and Parallel Card lets you connect PC-compatible equipment such as a modem, image scanner, or a digital camera.

The bidirectional parallel port on your PC Serial and Parallel Card lets you connect PC-compatible equipment such as a printer or a security dongle.



Appendix
Technical Information

General specifications

Description

- 7-inch PC Serial and Parallel Card (PCI)

Power

- +5 volts (V)
- 1 watt maximum

Ports

- One PC-compatible 16550, RS-232C serial port with a DB-9 connector
- One PC-compatible parallel port with a DB-25 connector

Environment

Temperature

- *Operating:* 10° C to 40° C (50° F to 104° F)
- *Non-operating:* –40° C to 65° C (–40° F to 149° F) for 72 hours

Relative humidity

- *Operating:* 10% to 90% noncondensing
- *Non-operating:* 5% to 95% noncondensing

Altitude

- *Operating:* –1,000 to 10,000 feet (–304.8 m to 3,048 m)
- *Non-operating:* –1,000 to 40,000 feet (–304.8 m to 12,192 m)

The Apple Publishing System

This Apple manual was written, edited, and produced on a desktop publishing system using Apple Macintosh computers and QuarkXPress. Technical illustrations were drawn in Adobe™ Illustrator; screen shots were created and modified with system software, ExposurePro, and Adobe Photoshop. Final pages were output using PostScript™ technology.

Text type is Times®, display type is Helvetica® Narrow, and cover type is Apple Garamond, Apple's corporate font. Ornaments are custom symbols designed for Apple Computer. Some elements, such as computer voice, are set in Courier, a fixed-width font.

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PC Serial and Parallel Card

User's Manual

Apple Computer, Inc.

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Contents

Communications regulation information vii

Preface Read This Before You Install Your Card ix

What comes with your card x

Installing the PC Serial and Parallel Card x

1 Installing the Card in a Power Macintosh 4400 or 7220 1

What you need 2

Installing the PC Serial and Parallel Card hardware 2

Opening the computer 3

Preparing the slots 5

Attaching the peripheral flex cable to the PC Compatibility Card 6

Attaching the peripheral flex cable to the PC Serial and Parallel Card 7

Inserting the PC Serial and Parallel Card 8

Replacing the computer's cover 10

What's next? 11

2 Installing the Card in a Power Macintosh 6400 or 6500 13

What you need 14

Installing the PC Serial and Parallel Card hardware 14

Opening the computer 15

Preparing the slots 19

Attaching the peripheral flex cable to the PC Compatibility Card 20

Inserting the PC Serial and Parallel Card 22

Attaching the peripheral flex cable to the PC Serial and Parallel Card 23

Replacing the logic board 24

What's next? 25

3 Installing the Card in a Power Macintosh 7200, 7300, 7500, or 7600 27

What you need 28

Installing the PC Serial and Parallel Card hardware 28

Opening the computer 29

Opening the expansion card cover 32

Preparing the slots 33

Attaching the peripheral flex cable to the PC Compatibility Card 34

Inserting the PC Serial and Parallel Card 35

Attaching the peripheral flex cable to the PC Serial and Parallel Card 36

Replacing the expansion card cover 37

Replacing the computer's cover 38

What's next? 39

4 Installing the Card in a Power Macintosh 8500 or 9500 41
What you need 42
Installing the PC Serial and Parallel Card hardware 42
Opening the computer 43
Preparing the slots 47
Attaching the peripheral flex cable to the PC Compatibility Card 48
Inserting the PC Serial and Parallel Card 49
Attaching the peripheral flex cable to the PC Serial and Parallel Card 50
Replacing the computer's cover 51
What's next? 52
5 Installing the Card in a Power Macintosh 8600 or 9600 53
What you need 54
Installing the PC Serial and Parallel Card hardware 54
Opening the computer 55
Preparing the slots 59
Attaching the peripheral flex cable to the PC Compatibility Card 60
Inserting the PC Serial and Parallel Card 60
Attaching the peripheral flex cable to the PC Serial and Parallel Card 62
Replacing the computer's cover 63
What's next? 64

6 Updating Your PC Compatibility Card Software 65
Updating the Windows/DOS PC Compatibility software 66
Updating the Mac OS PC Compatibility software 67
7 Connecting PC-Compatible Equipment 69
What you can connect 70
Appendix Technical Information 71
General specifications 71
Environment 71

Communications regulation information

FCC statement

This equipment has been tested and found to comply with the limits for a Class B digital device in accordance with the specifications in Part 15 of FCC rules. See instructions if interference to radio or television reception is suspected.

Radio and television interference

The equipment described in this manual generates, uses, and can radiate radio-frequency energy. If it is not installed and used properly—that is, in strict accordance with Apple's instructions—it may cause interference with radio and television reception.

This equipment has been tested and found to comply with the limits for a Class B digital device in accordance with the specifications in Part 15 of FCC rules. These specifications are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation.

You can determine whether your computer system is causing interference by turning it off. If the interference stops, it was probably caused by the computer or one of the peripheral devices.

If your computer system does cause interference to radio or television reception, try to correct the interference by using one or more of the following measures:

- Turn the television or radio antenna until the interference stops.
- Move the computer to one side or the other of the television or radio.
- Move the computer farther away from the television or radio.
- Plug the computer into an outlet that is on a different circuit from the television or radio. (That is, make certain the computer and the television or radio are on circuits controlled by different circuit breakers or fuses.)

If necessary, consult an Apple-authorized service provider or Apple. See the service and support information that came with your Apple product. Or, consult an experienced radio/television technician for additional suggestions.

IMPORTANT Changes or modifications to this product not authorized by Apple Computer, Inc., could void the FCC Certification and negate your authority to operate the product.

This product was tested for FCC compliance under conditions that included the use of Apple peripheral devices and Apple shielded cables and connectors between system components. It is important that you use Apple peripheral devices and shielded cables and connectors between system components to reduce the possibility of causing interference to radios, television sets, and other electronic devices. You can obtain Apple peripheral devices and the proper shielded cables and connectors through an Apple-authorized dealer. For non-Apple peripheral devices, contact the manufacturer or dealer for assistance.

Industry Canada statement

This Class B device meets all requirements of the Canadian interference-causing equipment regulations.

Cet appareil numérique de la Class B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

VCCI Class 2 statement

情報処理装置等電波障害自主規制について

この装置は、情報処理装置等電波障害自主規制協議会（VCCI）の基準に基づく第二種情報技術装置です。この装置は、家庭環境で使用することを目的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると、受信障害を引き起こすことがあります。

取扱説明書に従って正しい取り扱いをしてください。

Read This Before You Install Your Card

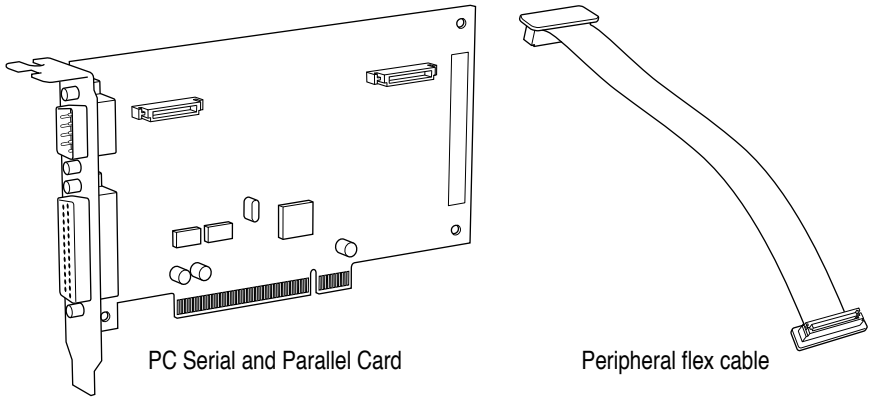
The PC Serial and Parallel Card has two standard PC ports that allow you to use several kinds of PC-compatible peripheral devices from the Windows or DOS environment (but not from the Mac OS environment). You use this card in conjunction with a 7-inch or 12-inch PC Compatibility Card. If you do not already have a PC Compatibility Card installed, you must install it along with the PC Serial and Parallel Card.

With a PC Serial and Parallel Card connected to a PC Compatibility Card, you can

- connect high-speed RS-232 serial devices such as modems
- connect parallel devices such as printers, removable media drives, and security dongles that are supplied with some Windows or DOS software applications

What comes with your card

Before you begin installation, be sure you have the PC Serial and Parallel Card and peripheral flex cable, as shown.



Installing the PC Serial and Parallel Card

IMPORTANT To avoid damage to your computer, Apple recommends that you have your card installed by an Apple-authorized dealer. If you attempt to install the card yourself, any damage you may cause to your equipment will not be covered by the limited warranty on your computer.

If you want to install the card yourself, follow these steps:

- To install your card, turn to the installation chapter for the kind of computer you have.
- To update your software and begin using your card, turn to Chapter 6, "Updating Your PC Compatibility Card Software."
- To connect equipment to your PC Serial and Parallel Card, turn to Chapter 7, "Connecting PC-Compatible Equipment."